

DEC 31 1928

U. S. DEPARTMENT OF LABOR
JAMES J. DAVIS, Secretary
BUREAU OF LABOR STATISTICS
ETHELBERT STEWART, Commissioner

MONTHLY LABOR REVIEW

PERIODICAL ROOM
GENERAL LIBRARY
UNIV. OF MICH.

Vol. 27, No. 6



December, 1928

SPECIAL FEATURES IN THIS ISSUE

- Productivity in merchant blast furnaces, p. 1
- General health work of labor organizations, p. 11
- Family allowances in foreign civil service, p. 20
- Public labor exchanges in Europe, p. 49
- Labor legislation of 1928, p. 122
- Wages and hours of labor in sawmills, p. 173
- Wages and hours in boot and shoe factories, p. 179

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON
1928

**NEW PUBLICATIONS OF
THE BUREAU OF LABOR STATISTICS**

Settlement for accidents to American seamen. Bulletin No. 466.

**Activities and functions of a State department of labor. Bulletin
No. 479.**

IN PRESS

Labor organizations in Chile. Bulletin No. 461.

Retail prices, 1890-1927. Bulletin No. 464.

Beneficial activities of American trade-unions. Bulletin No. 465.

**Building permits in the principal cities of the United States in 1927.
Bulletin No. 469.**

Labor legislation of 1927. Bulletin No. 470.

**Joint industrial control in the book and job printing industry. Bulletin
No. 481.**

U. S. DEPARTMENT OF LABOR
JAMES J. DAVIS, Secretary
BUREAU OF LABOR STATISTICS
ETHELBERT STEWART, Commissioner

MONTHLY LABOR REVIEW

VOLUME 27

NUMBER 6



DECEMBER, 1928

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON
1928

U. S. DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS
MONTHLY

LABOR REVIEW

CERTIFICATE

This publication is issued pursuant to the provisions of the sundry civil act (41 Stats. 1430) approved March 4, 1921.



ADDITIONAL COPIES

OF THIS PUBLICATION MAY BE PROCURED FROM
THE SUPERINTENDENT OF DOCUMENTS
U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.

AT

15 CENTS PER COPY

SUBSCRIPTION PRICE PER YEAR

UNITED STATES, CANADA, MEXICO, \$1.50; OTHER COUNTRIES, \$2.25

Contents

| Special articles: | Page |
|---|----------|
| Productivity of labor in merchant blast furnaces..... | 1-10 |
| General health work of labor organizations..... | 11-20 |
| Family allowances in the civil service of foreign countries..... | 20-27 |
| German Federation of Labor—Its strength and organization, by Fritz Kummer..... | 27-33 |
| Unemployment conditions and relief: | |
| Character and value of employment statistics | 34-48 |
| Proposal for three billion dollar reserve fund to stabilize employment ... | 48, 49 |
| The work of European labor exchanges, by Peter A. Speck | 49-61 |
| Unemployment insurance in foreign countries..... | 62-72 |
| Unemployment conditions in Europe in the latter part of 1928..... | 72-78 |
| Unemployment and business stability in Australia..... | 78-82 |
| A study of public works and unemployment, 1919 to 1925..... | 82-85 |
| Industrial relations and labor conditions: | |
| Southern labor problems as presented in the American Federationist..... | 86-89 |
| Chinese and Japanese in Pacific Coast States..... | 90-92 |
| Survey of the use of machinery in coal mining..... | 92, 93 |
| Abolishing a definite age limit in employment | 93 |
| Women in industry: | |
| Industrial night work of women..... | 94-96 |
| Industrial accidents: | |
| California—Fatalities in the petroleum industry, 1927..... | 97, 98 |
| New Jersey—Industrial accidents in 1927..... | 98 |
| New York— | |
| Causes of serious accidents..... | 98-100 |
| Infection resulting from industrial accidents..... | 100 |
| Health and industrial hygiene: | |
| Ability of patients to pay for medical care..... | 101-103 |
| Death of industrial chemist from radium poisoning..... | 103 |
| National conference on mutual benefit associations..... | 104, 105 |
| Poland—Nurseries for infants in factories..... | 106 |
| Workmen's compensation: | |
| Workmen's compensation legislation of 1928..... | 107-112 |
| Constitutionality of longshoremen's compensation act..... | 112 |
| Ohio State fund rate classification upheld..... | 112, 113 |
| New York— | |
| Compensated industrial accidents in 1927 and 1928..... | 114, 115 |
| Cost of eye injuries..... | 115 |
| Recent workmen's compensation reports— | |
| Kansas..... | 116 |
| Nebraska..... | 116, 117 |
| Ohio..... | 117 |
| Tennessee..... | 118 |
| Wisconsin..... | 118, 119 |
| Alberta..... | 119, 120 |
| France—Application of law relating to occupational diseases..... | 120, 121 |

| | |
|---|----------|
| Labor laws and court decisions: | Page |
| Labor legislation of 1928..... | 122-127 |
| Shipowners' employment agency activity not a combination in restraint of trade..... | 127-130 |
| Brazil—Law on employment contracts of theatrical artists..... | 130 |
| Venezuela—New labor law..... | 130-136 |
| Housing: | |
| Financing the home..... | 137 |
| Cooperation: | |
| Congress of consumers' cooperative societies, 1928..... | 138-145 |
| Relations between farmers' marketing cooperatives and consumers' cooperatives, by L. S. Herron..... | 145-147 |
| Federal Trade Commission report on cooperative marketing..... | 147-152 |
| Labor organizations and congresses: | |
| Canada—Convention of Trades and Labor Congress, 1928..... | 153-155 |
| Workers' education and training: | |
| Workers' education movement in the South..... | 156, 157 |
| Training of dining-car employees..... | 157, 158 |
| Plan to establish working girls' study classes in various cities..... | 158 |
| Training and placement of handicapped workers: | |
| Laws governing State commissions for the blind..... | 159, 160 |
| Industrial disputes: | |
| Strikes and lockouts in the United States in October, 1928..... | 161-166 |
| Conciliation work of the Department of Labor in October, 1928.... | 166-169 |
| Settlement of trainmen's dispute on western railroads..... | 170 |
| Cooperation of union and employer to win an industrial dispute.. | 171, 172 |
| Sweden—Settlement of labor conflict at iron mines..... | 172 |
| Wages and hours of labor: | |
| Wages and hours of labor in sawmills, 1928..... | 173-178 |
| Wages and hours in the boot and shoe industry, 1928..... | 179-188 |
| Wage rates of farm labor..... | 188-190 |
| California—Wage rates of grape pickers..... | 190, 191 |
| Colombia—Sunday rest..... | 191 |
| Trend of employment: | |
| Employment in selected manufacturing industries, October, 1928.. | 192-204 |
| Employment in coal mining in October, 1928..... | 204, 205 |
| Employment in public utilities in October, 1928..... | 205, 206 |
| Employment in wholesale and retail trade in October, 1928..... | 206, 207 |
| Employment on steam railroads in the United States..... | 207, 208 |
| Massachusetts—Unemployment of organized building-trades workers, April, 1927, to October, 1928..... | 208, 209 |
| Changes in employment and pay rolls in various States..... | 210-214 |
| Wholesale and retail prices: | |
| Retail prices of food in the United States..... | 215-232 |
| Retail prices of coal in the United States..... | 232-235 |
| Index numbers of wholesale prices in October, 1928..... | 235-237 |
| Wholesale prices in the United States and in foreign countries, 1923 to September, 1928..... | 237-240 |
| Immigration and emigration: | |
| Statistics of immigration for September, 1928..... | 241 |
| Publications relating to labor: | |
| Official—United States..... | 242, 243 |
| Official—Foreign countries..... | 243-245 |
| Unofficial..... | 245-247 |

This Issue in Brief

Labor productivity in merchant blast furnaces has more than doubled during the past few years, according to an investigation made by the Bureau of Labor Statistics. The average output of pig iron per man-hour in the period 1912 to 1914 was 0.141 gross ton, while for the year 1926 the output was 0.296 gross ton. This increase in productivity has taken place almost entirely since the war and is due to many causes, one of the principal ones being the abandonment of many of the inefficient high-cost plants. Page 1.

Efforts of trade-unions to improve the health of their members by raising the standards of sanitation and cleanliness in the work places have been widespread. Among the unions outstanding in this respect are the printing and the clothing trades unions. Several unions are also providing individual health service for their members. Thus, the locals of the Amalgamated Clothing Workers in Cincinnati and Chicago are planning to establish dental clinics; in the former city a general health service is already provided. The Brotherhood of Locomotive Engineers has a urinalysis service for its members, and the International Ladies' Garment Workers' Union a medical and dental service at which the worker may obtain nearly any kind of medical and dental attention. Page 11.

Supplementary salary allowances to married employees with children are being paid in the civil service of at least 23 foreign countries, according to the latest available reports. The outstanding argument advanced in favor of this practice in Government employment abroad is that it solves the old problem of the married worker with a large family. Page 20.

A proposal to create a three billion dollar reserve construction fund to reduce unemployment was made at the recent conference of governors, at President-elect Hoover's request. The scheme is intended to accomplish for industry and labor what the Federal reserve system has achieved for finance. A brief outline of the project appears on page 48.

The continued gravity of the unemployment problem in most European countries is evident from official statistics for the late summer of 1928. Moreover, the problem will almost undoubtedly become more acute with the advance of winter. Among the more important industrial countries, employment conditions seem especially serious in the United Kingdom and in Germany. The greatest improvement in employment conditions in Europe during recent months seems to have occurred in Poland. Page 72.

The development of unemployment insurance in Europe has been rapid since 1911, when the first national unemployment insurance act enacted in any country was put into effect in Great Britain. At the present time 18 countries in Europe, and Queensland in Australia, have either voluntary or compulsory insurance schemes, fostered and aided by the State, which are designed for the immediate relief of unemployment and some of which, also, include measures which tend to ameliorate conditions leading to unemployment. Page 62.

The potential power of public works in averting cyclical unemployment has recently been statistically measured by an investigator on the staff of the University of Illinois. The period reviewed in his study is 1919-1925 and his main conclusions are: That the amount of public construction in these seven years was of sufficient volume to have prevented the major part of factory unemployment if this construction had been properly shifted, that such shift would not have substantially affected construction costs for the period as a whole, and that the formidable political handicaps of such a scheme could be overcome through an enlightened public energetically bent on the elimination in part of the unemployment evil. Page 82.

Wage surveys of the sawmill and the boot and shoe industries have just been completed by the Bureau of Labor Statistics.

Average full-time weekly earnings in sawmills were found to be \$21, the average full-time weekly hours being 56.6. Only 18 of the 58,007 employees covered were females. Page 173.

In the boot and shoe industry, the average full-time weekly earnings for males were \$30.63 and for females, \$19.53. The average weekly hours for males were 49 and for females, 49.2. Page 179.

Progress in workmen's compensation legislation during the year 1928 was particularly noticeable: In New York by improvement in the administrative machinery, in New Jersey by increasing minimum and maximum weekly payments, in Rhode Island by a tendency away from court administration, by the extension of the longshoremen's act to employers and employees in the District of Columbia, by the passage of a comprehensive act in the Philippines, and by the re-enactment of the compensation law of Porto Rico with several changes. Page 107.

The questions of cooperative insurance, of how to advance cooperation, of how to deal with the problem of credit trading, and of meeting chain-store competition were the chief subjects before the sixth congress of consumers' cooperative societies. A general account of the discussion and actions of the congress is given on page 138.

MONTHLY LABOR REVIEW

OF U. S. BUREAU OF LABOR STATISTICS

VOL. 27, NO. 6

WASHINGTON

DECEMBER, 1928

Productivity of Labor in Merchant Blast Furnaces

THE productivity of labor in the merchant blast-furnace industry was more than twice as great in 1926 as in the pre-war period 1912-1914, according to an investigation just completed by the United States Bureau of Labor Statistics. The full report will be published shortly in bulletin form. A summary of the plants covered by this investigation shows that the average output of pig iron per man-hour of labor in the period 1912 to 1914 was 0.141 gross ton, while for the year 1926 the output was 0.296 gross ton. Or to state it another way, it required slightly more than 7 hours of labor time to produce a gross ton of pig iron in the pre-war period as against 3 hours and 23 minutes in 1926.

This increase in productivity has taken place almost entirely since the war. The great expansion in pig-iron production, which began in 1915 and continued almost without interruption until the summer of 1920, was accompanied by a comparatively small increase in output per man-hour of labor. The summary averages indicate that the output per man-hour in the merchant-furnace industry remained fairly constant from 1912 until after the war. In 1920 the output was 0.157 gross ton per man-hour, which means that it required 6 hours and 22 minutes of labor time to produce a ton of pig iron, only a slight increase in productivity as compared with the pre-war period. Beginning with 1921 the productivity averages turn sharply upward and continue in that direction in every succeeding year except one—that is, the increase in productivity during the period covered by this study has been due almost entirely to the rapid improvement in the industry during the last six years.

One of the most important causes of the great improvement in output per man-hour has been the abandonment of many of the inefficient low-productivity plants. In 1921 the average output per man-hour in merchant blast furnaces was very much higher than in the previous year because the depression forced out many of the weaker plants, leaving mostly high-productivity plants in operation. During the prosperity of 1923 many low-productivity plants came back into the industry, but the keener competition of the steel works blast furnaces since then has driven a great number of them out of business. Less than three-fourths of the merchant plants operating in 1923 remained active until 1926, and the high-productivity average of the

later year is due in no small degree to the closing down of inefficient plants.

Prosperity and depression, however, exert a second influence on productivity which directly counteracts the effect of the one mentioned above. It is usual to find that the productivity of a single plant is highest in years of full and complete operation and lowest in times of depression. For general purposes the labor required to operate a blast furnace can be divided into two parts—the direct producing labor which is essential to the operation of the stack itself and the indirect auxiliary labor required for repairs, transportation, power, etc. The man-hours of the first type of labor will ordinarily vary directly with the number of stacks and the length of time operated; but the indirect labor is not so flexible in amount, being quite out of proportion when only one stack of a two-stack plant is operating or when one stack operates only a short time during the year. Applying this to the industry as a whole, it is evident that the decline in productivity brought about by the influx of low-productivity plants in prosperous years is partly counteracted by the output per man-hour which will be attained by those plants which have been operating at full capacity all along.

Another important factor causing the increase in productivity has been the improvement of blast furnaces and the technical improvements in operation, both of which are reflected in greater daily production per furnace. Prior to the war the average daily output of a merchant blast furnace was about 260 gross tons, while in 1926 the average was 369 tons, about 40 per cent higher. This does not mean, of course, that the general run of stacks had their capacity enlarged to this extent; the increased average for the industry has been due in part to the abandonment of many small stacks and the construction of a few large ones. An increase in the daily output of a blast furnace does not require a proportionate increase in labor per ton; therefore, one method of improving productivity in a plant is to enlarge the furnace or to operate it more efficiently. In fact, a considerable part of the increase in productivity from 1911 to 1927 was due to the high output per stack-day of the average blast furnace.

Substitution of Machinery for Hand Labor

PRODUCTIVITY has also been influenced by the substitution of machinery for hand labor. The most important labor-saving devices have been (a) mechanical charging and (b) machine casting, which have eliminated large numbers of hand laborers engaged in charging materials into the stack and in handling the pig iron after it has been cast. Of the 37 plants furnishing data for the pre-war years 1911–1914, 15 were both hand filled and sand cast, while only 8 were mechanically filled and machine cast. But in 1926, of 49 plants furnishing data, only 3 were both hand filled and sand cast, while 34 were both mechanically filled and machine cast.

Another development in recent years, which has had an important effect on the number of men required to operate a blast furnace, is the substitution of the 8-hour day for the 12-hour day. Although three crews were required where two had been used before, the labor force was so reorganized in a majority of plants that very few more

men were employed, while the total man-hours were actually reduced. Shorter hours have lessened the strain on the workers, so that the men can be kept more continuously at work. This has frequently led to the combination or elimination of occupations formerly essential. Thus shorter hours have furnished added incentive to more efficient production, resulting in higher productivity of labor. The effect of the 8-hour day on the productivity averages for the industry has been limited because the 12-hour day still persists in a considerable number of plants, but the influence of the shorter day can be measured in the productivity of individual plants.

The above analysis does not by any means exhaust the list of causes affecting productivity. It is impossible to take account statistically of the increased good will existing between the management and the workers because of shorter hours and higher wages, or of the increased skill and efficiency of the workers, or of improved management of labor. These have contributed to the remarkable advance in the productive efficiency of the industry, but nothing more can be done in this study than to indicate their presence in the total mass of factors which have brought about the change.

Scope and Method of Study

TO DETERMINE output per man-hour it has been necessary to obtain (a) annual production of pig iron in gross tons, and (b) total annual man-hours of labor chargeable against blast-furnace operation. To explain the changes in tons of pig iron produced per man-hour, information has been obtained relating to materials, operation, and equipment showing some of the principal causes of increasing productivity.

Data for this study were compiled for the most part by agents of the bureau in the field from the records of the companies. The information relating to *production* and *operation* was quite easily accessible in most cases, but difficulty was frequently encountered in compiling figures for the total man-hours of labor. Pay rolls, force reports, and other records from which man-hours may be derived were sometimes fragmentary, or completely absent for some years, while in other cases the effort required to make compilations from available records was so great that the schedules for certain companies have been confined to recent years only. The period covered, from 1911 to 1927, was selected for two reasons: (1) It was desired to include pre-war, war, and postwar conditions, and (2) in connection with accident reports the bureau had already collected figures during this period showing the total man-hours worked in many of the blast-furnace plants in the country. The data obtained have made it possible to construct a thoroughly comprehensive picture of the productivity situation for 1926; in addition, the information available for earlier years has been reasonably adequate for the measurement of changing productivity since 1920, while for years prior to 1920 the number of plants studied is sufficiently large to be at least a fair sample of the industry.

The term "merchant blast furnace," as it is commonly understood in the industry, covers those plants producing pig iron for sale in the open market. As used in this study, the merchant industry covers not only the above plants but it also includes a few steel-company

furnaces which, because of their isolation and independence of operation, closely resemble the former group. The definition of a merchant blast furnace for the purposes of this study has been framed so as to include all blast-furnace plants whose management and labor crews are independent of steel works and whose metal is cast into pigs to be remelted by consumers instead of being furnished in molten condition to adjacent steel furnaces. For purposes of measuring productivity of labor, neither the ownership of the plant nor the marketing of the product is of any special importance, while the method of casting the metal and the organization of the labor crews are decisive factors; therefore, steel-company blast-furnace plants which are independently operated and which cast their metal into pigs are assigned to the merchant blast-furnace industry in this study.

The total labor time charged against the product includes the hours of labor of all men working on the particular process regardless of their skill or training. The hours of the superintendent are counted just the same as the hours of the unskilled laborer in the yard crew, though the former may be worth ten times as much as the latter. It is not practicable to make any allowances for the quality of the labor entering into the product. The total man-hours of labor time charged against the blast furnace include all direct labor hours as well as the hours of all overhead producing labor—plant superintendent, foremen, chemists, and all clerks in the plant office directly concerned with production. On the other hand, clerks and bookkeepers working in accounting, all labor in the general office, and all labor connected with sales or delivery of the product have been excluded.

A productivity study in the merchant blast-furnace industry is largely a study of the substitution of machinery and engineering efficiency for labor. When output is increased because of enlargement of the plant or improved operating efficiency it is at least possible to assume that the increased production has come about in response to a better demand, and therefore no reduction need be made in the number of men employed; but an increase in productivity by the introduction of a new labor-saving machine is sure to result in some displacement of labor in the particular plant. As far as the whole industry is concerned, unless the increase in productivity, through the expansion in production, is paralleled by an equal increase in demand for the product, it will cause a reduction in the labor requirements of the industry and throw some men out of work.

When changing productivity can be related to its underlying causes light is thrown on the relative importance of various methods of increasing production per worker or reducing the labor time required in production.

Because output per man per hour in pig-iron production has increased, it is not to be assumed that either the workers or the management can claim sole responsibility for the change. An hour of a man's time expended in production is merely a useful unit to be related to production in measuring the combined effectiveness of management, labor efficiency, new processes, and all other factors which affect productivity.

The problem in measuring productivity, whether from original records and individual plants or for an entire industry, is that of

using and harmonizing the statistics of production and of employment which are already being compiled for other purposes. When the importance and practicability of productivity measurement are clearly understood it may lead to the keeping of records in such a way that changes in output per man-hour can be shown with fair accuracy from month to month or year to year without undue effort.

Trend in Productivity

THE summary for the merchant blast-furnace industry, which is presented in Table 1, shows the productivity averages for the 80 plants covered in this study. Annual averages are shown for all years, 1919 to 1926, but averages for years prior to 1919 are given for one 2-year period, 1917-1918, and one 3-year period, 1912-1914. Figures for the years 1911, 1915, 1916, and 1927 do not cover a sufficient number of plants to be representative of the industry and these years have not been considered in the summary. From 1919 to 1926 the productivity averages represent from about 75 to 90 per cent of the industry in each year, with only a slightly smaller representation in 1917 and 1918. In the pre-war years, 1912, 1913, and 1914, the proportion of the industry covered is about 30 per cent, which would be a sufficiently large sample, if it were thoroughly representative. However, when the figures for 1912, 1913, 1914, 1917, and 1918 have been analyzed it is found that the sample for each year, while large enough as regards number of plants covered, is not sufficiently representative in character to be used in drawing conclusions for the industry as a whole. Certain plants with low productivity are missing from the data for some years, while the reverse is true in others. Therefore, since the purpose of this summary is to give as clear a picture of the trend in labor productivity in the industry as possible, it was considered desirable to combine the data for the years 1917 and 1918 and for the years 1912, 1913, and 1914, thus obtaining figures for larger and more representative samples.

TABLE 1.—AVERAGE LABOR PRODUCTIVITY IN ALL MERCHANT BLAST-FURNACE PLANTS COVERED, BY SELECTED PERIODS AND YEARS, 1912 TO 1926

| Year | Total number of plants | Total number of stacks | Average number of full-time stacks active during year | Average productivity | |
|-----------|------------------------|------------------------|---|---------------------------------|--|
| | | | | Output per man-hour (gross ton) | Man-hours per gross ton of pig iron produced |
| 1926..... | 49 | 78 | 50.3 | 0.296 | 3.379 |
| 1925..... | 43 | 67 | 43.1 | .285 | 3.511 |
| 1924..... | 49 | 76 | 42.2 | .244 | 4.095 |
| 1923..... | 60 | 88 | ¹ 60.3 | .213 | 4.693 |
| 1922..... | 40 | 66 | 27.1 | .232 | 4.302 |
| 1921..... | 36 | 68 | ¹ 15.4 | .178 | 5.614 |
| 1920..... | 57 | 90 | ² 63.1 | .157 | 6.367 |
| 1919..... | 50 | 79 | ¹ 45.7 | .144 | 6.948 |
| 1918..... | 56 | 86 | ² 70.8 | .143 | 7.013 |
| 1917..... | | | | | |
| 1914..... | 37 | 60 | ³ 44.6 | .141 | 7.087 |
| 1913..... | | | | | |
| 1912..... | | | | | |

¹ Not including 1 plant for which days operated were not reported.

² Not including 3 plants for which days operated were not reported.

³ Not including 2 plants for which days operated were not reported.

Table 2 shows the annual totals and unadjusted averages for the 80 plants covered in this study. The total man-hours of labor and the total production of pig iron include those plants which reported man-hours in each year, the number of plants being shown in column 1. During the period 1921 to 1926 the variations in the number of plants shown represent almost exactly the number of plants operating in the industry each year, and the samples shown for 1919 and for 1920 represent a considerable portion of the industry in those years; but for the period 1911 to 1918 it can not be assumed that the variations in number of plants correspond very closely to the number of plants operating. The percentage of the total industry represented in the bureau figures increases rapidly from 1911 to 1920, partly because many blast furnaces now abandoned were then operating and partly because many of the plants for which the bureau has schedules could not furnish the man-hours for these early years. Lack of data is responsible for the annual variations in the number of plants in the averages for 1911 to 1920.

TABLE 2.—LABOR PRODUCTIVITY, TOTAL HOURS OF LABOR, TOTAL PRODUCTION AND AVERAGE PRODUCTION PER STACK-DAY, IN ALL MERCHANT BLAST FURNACES COMBINED, BY YEARS, 1911 TO 1927

| Year | Total number of plants reporting | Total number of stacks | Average number of full-time stacks active during year | Average labor productivity | | Total one-man hours of labor | Production of pig iron | | Per cent of total— | |
|-------------------|----------------------------------|------------------------|---|---------------------------------|--|------------------------------|------------------------|------------------------------------|-----------------------------------|--|
| | | | | Output per man-hour (gross ton) | Man-hours per gross ton of pig iron produced | | Total (gross tons) | Average per stack-day (gross tons) | Production which was machine cast | Stacks which were mechanically charged |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| 1927 ¹ | 21 | 34 | 25.5 | 0.300 | 3.329 | 6,108,201 | 1,834,736 | 397.5 | 81 | 91 |
| 1926 | 49 | 78 | 50.3 | .296 | 3.379 | 22,881,062 | 6,770,861 | 369.1 | 85 | 87 |
| 1925 | 43 | 67 | 43.1 | .285 | 3.511 | 19,526,548 | 5,561,138 | 353.5 | 82 | 88 |
| 1924 | 49 | 76 | 42.2 | .244 | 4.095 | 20,675,056 | 5,049,452 | 327.2 | 75 | 84 |
| 1923 | 60 | 88 | ² 60.3 | .213 | 4.693 | 30,649,850 | 6,531,544 | ² 294.9 | 72 | 71 |
| 1922 | 40 | 66 | ² 27.1 | .232 | 4.302 | 14,014,155 | 3,257,670 | 329.8 | 75 | 73 |
| 1921 | 36 | 68 | ² 15.4 | .178 | 5.614 | 9,130,917 | 1,626,427 | ² 287.1 | 71 | 68 |
| 1920 | 57 | 90 | ³ 63.1 | .157 | 6.367 | 37,573,753 | 5,901,039 | ³ 247.5 | 63 | 56 |
| 1919 | 50 | 79 | ³ 45.7 | .144 | 6.948 | 29,368,837 | 4,227,118 | ² 246.6 | 58 | 56 |
| 1918 | 48 | 75 | ⁴ 60.8 | .131 | 7.654 | 40,231,261 | 5,256,144 | ⁴ 225.6 | 56 | 54 |
| 1917 | 45 | 61 | ⁴ 49.8 | .150 | 6.688 | 31,711,303 | 4,741,447 | ⁴ 249.8 | 50 | 49 |
| 1916 | 9 | 15 | 10.9 | .147 | 6.787 | 6,271,000 | 923,950 | 231.9 | 50 | 73 |
| 1915 | 10 | 16 | 11.6 | .159 | 6.278 | 6,715,495 | 1,069,715 | 252.5 | 31 | 75 |
| 1914 | 27 | 47 | ³ 29.0 | .160 | 6.457 | 18,710,140 | 2,994,879 | ³ 262.3 | 31 | 64 |
| 1913 | 28 | 39 | ³ 29.0 | .151 | 6.632 | 18,982,366 | 2,862,336 | ³ 258.3 | 42 | 56 |
| 1912 | 27 | 37 | ⁵ 23.7 | .150 | 6.667 | 16,759,540 | 2,513,681 | ⁵ 261.4 | 50 | 57 |
| 1911 | 22 | 30 | ⁵ 16.4 | .140 | 7.119 | 11,959,131 | 1,679,982 | ⁵ 260.5 | 45 | 57 |

¹ First six months.

² Not including 1 plant for which the days operated were not reported.

³ Not including 3 plants for which the days operated were not reported.

⁴ Not including 4 plants for which the days operated were not reported.

⁵ Not including 5 plants for which the days operated were not reported.

EXPLANATIONS

Column 1. Number of plants reporting data in each year.

Column 2. Number of stacks represented by the plants in column 1.

Column 3. Number of full-time, active stacks of the plants in column 1; figure obtained by dividing total stack-days of operation by 365.

Column 4. Gross tons of pig iron produced per man-hour of labor time; obtained by dividing total tonnage produced (column 7) by total man-hours of labor (column 6).

Column 5. Number of man-hours of labor required to produce a gross ton of pig iron; total man-hours (column 6) divided by total production (column 7).

Column 6. Total hours of labor of all plants shown in column 1.

Column 7. Total production of pig iron of all plants shown in column 1.

Column 8. Average output of pig iron per stack per day of 24 hours; obtained by dividing total production of pig iron by the total stack-days of operation.

Column 9. Total tonnage which was cast by a pig machine divided by the total production of pig iron (column 7).

The above summary table contains the annual man-hour and production totals for the full years 1911 to 1926 and the first six months of 1927. No attempt was made to cover for 1927 all the plants covered for 1926. From these totals the year-by-year productivity averages, also shown, were computed. In addition the table furnishes much data from which to study those averages. The average number of full-time stacks active during the year, when compared with the total number of stacks, shows the extent to which the plants have been operated. This is very important, as a plant operated intermittently or one which uses only a part of its equipment can not be expected to be as effective as one which operates to its full capacity all the time. Also the average production of pig iron per stack-day, per cent of total production which was machine cast, and the per cent of total stacks which were mechanically charged are very significant. Collectively, they constitute the most important checks on labor productivity contained in this study. Production per stack-day measures, among other things, the changes in the size of the producing unit. The per cent of total stacks mechanically charged furnishes one of the best clues to the reduction of the labor force. The extent to which the pig-casting machine has been introduced into the industry also has a bearing on the reduction of labor crews. However, in the early years the per cent of machine-cast metal is too high, as it happens that nearly all of the plants missing from the productivity data for 1911-1914 were sand-cast plants. However, this is partly offset by the fact that in recent years a few plants have used some metal in molten condition. In 1926, for example, only about 10 per cent of the total product was sand cast instead of 15 per cent as indicated by the table.

The averages of output per man-hour indicate that the increase in productivity, while not a gradual one, has been continuous. In only one year, 1923, was there a decrease in output per man-hour, and in that year more plants were in operation than in any other covered by the bureau's figures. This shows that the boom conditions of that year brought many low-productivity plants, which had been compelled to discontinue operation during the depression of 1921, back into the industry. Thus the decrease in productivity in 1923 was not due to any decrease in efficiency on the part of the workers or of the plants but to a change in proportion in the types of plants operating.

In the history of labor productivity from 1912 to 1926 there are two distinct periods of man-hour production—the first beginning with 1912 and continuing through 1921, and the second starting with 1922 and ending with 1926. During the first period there was no concentrated effort on the part of the managements to provide the newest and best tools or equipment for the use of labor in the manufacturing process. In many cases the equipment was antiquated and most of the work was done by hand. As a result, productivity during that period was on a low level, the variations from year to year being mostly due to the variation in plants in operation. However, as competition became keener and profits lower the fact was brought home to a large number of operators that if they remained in the industry their equipment must be modernized. Many operators took advantage of the depression in business in 1921 to overhaul

their plants. Thus, with the beginning of 1922, the modern plants in operation increased rapidly and by 1926 only a few of the plants still used the old hand methods.

An analysis of Table 2 shows that the available productivity data year by year do not adequately represent the whole industry throughout the period 1911 to 1927. The averages of output per man-hour indicate a slow, but steady, increase in productivity from 1912 to 1914, then a rather marked drop during the war period, 1916 to 1919, followed by a recovery to pre-war levels in 1920, with a rapid increase since that time except for the year 1923. The number of plants covered in 1911, 1915, 1916, and 1927 is too small and unrepresentative to be accepted as a basis for indicating the trend of the industry as a whole and data for those years are not considered in this summary. As previously stated, the productivity averages from 1919 to 1926 represent about 75 to 90 per cent of the industry, and the averages for years prior to 1919 cover a sufficient number of establishments to be used for the industry, provided the samples are thoroughly representative. However, certain plants with low productivity are absent in the averages for the 1912-1914 period, but they appear in the averages for one of the years 1917 or 1918. Also the averages for 1917 and 1918 are not thoroughly representative of the industry, as certain other types of plants are included in the averages for one year and not in the other. Therefore, the fluctuations in productivity prior to 1919 are due in part to the variations in the number of plants covered.

Since the trend of productivity over the period covered by this study is extremely important, it was considered desirable to make an adjusted summary for years prior to 1919 which would better express the changes in labor output. When the plants covered in the years 1917 and 1918 are taken collectively they form an excellent sample of the industry. A total of 56 plants is included instead of 48, the highest number covered in a single year, and all types of plants are covered. Thus, as both 1917 and 1918 were war years and subject to the same operating conditions, it was decided to combine the data and use an average for the war period rather than one for a single year. All plants with productivity data for either year are included in the adjusted summary. Since the figures for 1917 were more representative than those for 1918, the 1918 data were used for only those plants not furnishing figures for 1917.

A somewhat more complicated adjustment was made in the data for the years 1912-1914. The first step in the adjustment was almost identical with the one outlined above. All plants with productivity data for any year during the period were used. If a plant has data for more than one year, the year of best productivity, which is usually the one of full operation has been selected. This makes possible a pre-war average including 37 plants instead of 28. However, the average for the industry of 0.166 gross ton per man-hour is entirely too high, as the low-productivity plants mentioned above are still missing from the data. As these plants are included in the figures for later years it is obvious that some further refinement of the average must be made if it is to be used. This has been done by computing productivity averages for the 30 identical plants covered in both periods, 1912-1914 and 1917-18. These plants are thoroughly

representative of conditions in both periods, and the change in the averages for them, from 0.160 gross ton in 1912-1914 to 0.162 gross ton in 1917-18, has been accepted as typical of the change in all plants during that time. Thus, the figure which has been used in this report as the best representation of the productivity of labor in the industry as a whole during the period 1912-1914 was obtained from the proportion $0.162:0.143::0.160:x$. This results in 0.141 gross ton of product per man-hour of labor as shown in Table 1 for the period 1912-1914.

The following is an outline of the method used in adjusting the data:

TABLE 3.—OUTLINE OF METHOD USED IN ADJUSTING THE PRODUCTIVITY AVERAGES FOR THE YEARS 1912, 1913, 1914, 1917, AND 1918

| Year | Total number of plants covered in each year | Average output per man-hour in each year | Total number of plants covered in each period | Average output per man-hour in each period | Total number of identical plants covered in each period | Average output per man-hour for identical plants in each period | Adjusted average output per man-hour based on averages for identical plants |
|-----------|---|--|---|--|---|---|---|
| | | <i>Gross ton</i> | | <i>Gross ton</i> | | | <i>Gross ton</i> |
| 1918..... | 48 | 0.131 | 56 | 0.143 | 30 | 0.162 | ----- |
| 1917..... | 45 | .150 | | | | | |
| 1914..... | 27 | .160 | | | | | |
| 1913..... | 28 | .151 | 37 | .166 | 30 | .160 | 1 0.141 |
| 1912..... | 27 | .150 | | | | | |

¹ Obtained from the proportion $0.162:0.143=0.000:x$.

In order to show the position of the merchant furnaces in relation to the blast-furnace industry as a whole, and to bring out the proportion of the merchant industry covered by the present study, a classification of all active blast furnaces is presented in Table 4 below. This table is based upon data published in the 1916, 1920, and 1926 iron and steel directories¹ and upon the records of the bureau.

The data in the table are for the active plants and stacks only, although to be classed as active it was necessary only that a plant or stack should have been active at some time during the period, not active continuously. Here again, in the case of steel plants it is impossible to be certain of absolute accuracy on this point, because the directories do not specify which stacks out of a large number in the plant were idle throughout the period.

The count, as given in the table, is substantially accurate, although the classification of some plants in the early periods is somewhat uncertain. However, the number of such plants and stacks is not large enough to affect the data to any extent.

¹ American Iron and Steel Institute. Iron and steel works directory of the United States and Canada. Eighteenth, nineteenth, and twentieth editions—1916, 1920, and 1926.

TABLE 4.—TOTAL NUMBER OF ACTIVE BLAST FURNACES IN THE UNITED STATES, TOGETHER WITH THE ACTIVE MERCHANT BLAST FURNACES, BOTH IN TOTAL AND THOSE COVERED IN THIS STUDY, 1912 TO 1926

| Period or year | All active blast furnaces in the United States | | All active steel works blast furnaces | | All active merchant blast furnaces | | Active merchant blast furnaces covered in study | |
|----------------|--|------------------|---------------------------------------|------------------|------------------------------------|------------------|---|------------------|
| | Number of plants | Number of stacks | Number of plants | Number of stacks | Number of plants | Number of stacks | Number of plants | Number of stacks |
| 1926..... | (¹) | (¹) | (¹) | (¹) | 52 | 84 | ² 48 | ² 77 |
| 1921-1925..... | 145 | 350 | 58 | 226 | 87 | 124 | 68 | 93 |
| 1917-1920..... | 176 | 389 | 65 | 235 | 111 | 154 | 67 | 96 |
| 1912-1914..... | 167 | 358 | 53 | 194 | 114 | 164 | 36 | 56 |

¹ No data.

² Excluding one ferro-alloy plant.

The table brings out very clearly the decline of the merchant industry in competition with steel-works blast furnaces. In the early period 1912-1914 the merchant plants numbered more than twice as many as the steel plants, although the latter excelled in number of stacks, 194 to 164. By the next period 1917-1920 the merchant plants had declined slightly in number, but the steel-works blast furnaces increased both in plants and stacks. In 1921-1925 the steel plants receded somewhat from the peak, suffering a loss of 7 plants and 9 stacks, but the merchant plants declined more than 20 per cent, and their total stacks declined about the same amount. The steel plants had nearly twice as many stacks active during this period as the merchant plants had. However, it must not be assumed that there has been a corresponding decrease in production in either merchant or steel-works furnaces as the decline in number of plants is partly counterbalanced by the increase in size of the stacks. Nor do these figures convey the whole story, for quite a number of merchant stacks are included in the table as active because they ran for part of a year in 1923, while as a matter of fact they have not operated since and will not do so. The shrinkage in the merchant furnace industry is best shown by the figures for 1926, when there were less than half the number of merchant plants active that there were in the period 1912-1914. As a matter of fact, the decline in strictly merchant plants has been even greater than shown in the table, since the figures include a few independently operated steel company plants, which, according to the definition commonly accepted in the industry, are not classed as merchant. Some allowance must also be made for the fact that the data for 1926 cover only one year as against three years in 1912-1914.

General Health Work of Labor Organizations¹

THE trade-union approaches the problem of the health of its members either indirectly through the avenue of improvement of the places in which they spend their working life, or directly by adopting measures designed to benefit the individual member. The first approach is the more general, in fact the second may be said to be usually only an outgrowth or development of the first; it is usually only after extended work toward improved working conditions that the union expands this phase of its activity to include health work for the individual members. Wages and hours are generally the first concern of any labor organization after recognition of the union is secured; shorter hours and increased wages are, of course, a means for improving the workers' health, for they mean improved standards of living and time for rest and recreation. After these are settled, the next direct attack is made upon working conditions. Improvement in sanitary conditions in the industry means an advantage to the members collectively, but, as above noted, it is usually only after an extended experience with shop sanitation or with what are generally known as "trade-union benefits" such as those paid for sickness or disability, that the union becomes impressed with the necessity for preventive as well as remedial measures for the individual members along health lines.

Attempts by the unions to improve the health of the membership generally by raising the standards of sanitation and cleanliness in the workrooms have been very widespread indeed. Usually this is done through the incorporation in collective agreements of clauses guaranteeing safe and sanitary conditions in the plants where the union members are employed, the enforcement of these being left to the workers themselves, to a shop chairman or union representative, or to some machinery set up within the industry.

The clothing-trades unions, especially the International Ladies' Garment Workers' Union, have been very active in improving sanitary conditions in the industry. In several markets of the women's garment industry a joint board of sanitary control has been voluntarily set up, composed of representatives not only of workers and employers, but of the public as well. As a result of the work of this board, remarkable results have been obtained in raising health standards and in introducing safety measures. As the investigations of this board demonstrated the need, the local unions began not only to undertake the treatment of tuberculosis among their members but to adopt preventive measures such as the requiring of medical examination of all new members. Medical and dental work started by the joint board were taken over by the local unions and by them continued and expanded until to-day the Union Health Center furnishes such service to any union worker in New York City.

¹ Other articles dealing with various activities of trade-unions have appeared in the January (pp. 1-16), February (pp. 1-29), March (pp. 8-24), May (pp. 5-20), August (pp. 1-18), October (pp. 1-23), and November (pp. 4-9), 1928 issues of the *Labor Review*. A general report containing these and additional data is now in press and will appear as Bul. No. 465 of this bureau.

In the men's clothing industry also much has been done.

Individual health service has been extended to members by the Cincinnati locals of the Amalgamated Clothing Workers (those in New York City have the benefit of the Union Health Center) and the Brotherhood of Locomotive Engineers. In a number of instances unions which furnish no direct medical service to members, nevertheless make financial contributions to private institutions with the understanding that their members may receive treatment when necessary.

An indirect way of improving conditions in the trade is through the union label. Trades to which the use of a label is adapted have adopted a distinctive label which every employer who has an agreement with the union is entitled to use as long as he conforms to the terms of the agreement. Although usually primarily adopted for organization purposes, the presence of a label upon a commodity is a guaranty that the article was produced under fair terms of wages and hours and under sanitary conditions approved by the union.

For several years a workers' health bureau was carried on, membership in which was open to trade-unions. Under its auspices a trade-union health conference was held during 1927. This bureau, which was "established to assist organized labor to obtain health protection against industrial exploitation by means of trade-union action, adequate national and State protective legislation, and the development of workers' cooperative and scientific services," was discontinued during the summer of 1928, due, it is said, to insufficient financial support from the union organizations.

Efforts to Improve Shop Conditions

IN THE attempt to do away with shop conditions tending to be harmful to the health of the workers in them, trade-unions have quite generally incorporated into their collective agreements with employers provisions relating to sanitation. These may be either general provisions requiring that the employer "keep his shop in a sanitary condition," or may specify particular features desired, such as suitable and sanitary toilets, washing facilities, cool drinking water in the summer, heat in the working place in the winter, etc. Or they may require specific safeguards. Thus the International Stereotypers' and Electrotypers' Union states as its general policy its insistence upon "every possible improvement in the ventilated, lighted, and sanitary conditions of all shops where its members are employed, together with the use of hoods, guards, and safety appliances on machinery and metal pots, to the end that the health of our membership be conserved and the danger of accidents be minimized and avoided." It therefore enjoins upon all its local unions to secure in their agreements provisions pledging both employer and union to cooperate in sanitation, ventilation, and safety work, and to appoint a committee whose special duty it shall be to work along the above lines.

Agreements quite generally provide that the representative of the union shall be allowed access to the work place at any time to see that all the provisions of the agreement are being carried out and that the sanitary and other working conditions are all that they should be.

In the construction industry of New York City the painters' agreement provides that the sanitary conditions shall be under the supervision of the joint trade board which "shall make adequate and proper provisions for the health and safety of the men in connection with their work, and as far as possible protect them from the hazards of the trade." The 1927 agreement of the painters' district council of Brooklyn, N. Y., in addition to demanding that the employer make adequate provision to insure healthful working conditions, prohibits the use of paints containing benzol or of shellac cut in wood alcohol, and provides that "painting materials which are suspected of being injurious to the health are to be investigated by the union for the purpose of their regulation and elimination."

In 1925-26, the New York local of the International Photo-Engravers' Union cooperated with the board of health of that city in a study of the sanitary conditions of the industry and the physical condition of the men employed therein. The findings and recommendations of the report on this survey were hailed by the president of the international union as such as might "well be adopted by us as a general sanitary, health, and protective code," and he recommended that they be put into force by every local. The officers' report to the 1927 convention stated that the New York local was cooperating with the board of health to put into effect these recommendations. A survey of sanitary conditions was also reported to have been made by the Philadelphia local, and sanitary committees had been formed in Boston, San Francisco, Toledo, and Seattle.

Ladies' Garment Industry

The unions in the garment industries, which have learned from experience the dire effects of insanitary shop conditions, have been prominent in their health work. Especially is this true of the International Ladies' Garment Workers' Union. Organized in 1900 in an industry where sweatshop conditions were rife, with long hours and insanitary surroundings almost universal, the union was from the first confronted with the problem of improving the sanitary conditions under which its members worked.

Joint board of sanitary control.—A general strike in the cloak and suit industry in New York City in 1910 was settled by the signing of what was called "the protocol of peace," one of the provisions of which called for the establishment of a board composed of representatives of the employers, the union, and the public. The employers felt it unfair that the whole industry should be criticised because of the bad sanitary and working conditions existing in certain shops, and therefore cast about for some way of remedying the situation. The attorney for the manufacturers' association advanced the idea that the industry might itself take charge of the conditions under which the work was carried on and assume full responsibility for prescribing and, where necessary, enforcing standards of health and safety in its work places. The joint board of sanitary control was the outcome, and was formed of two representatives each of the employers, the union, and the public.

In 1911 the board made a preliminary investigation of 1,243 shops which disclosed that the health of the workers was menaced by inade-

quate protection against fire, lack of sanitary care and equipment, lack of adequate ventilation, overcrowding, pollution of air from coal and gas irons, and eyestrain due to faulty lighting. On the basis of the findings of this investigation the board drew up a set of 28 "sanitary standards" which were approved by the unions and employers, and the board was empowered to enforce them. Shop committees on sanitation were appointed in each shop whose duty it was to see that the sanitary conditions maintained were those set by the joint board. Any violations were to be reported by the committee to the board. In addition the board had a corps of trained inspectors who visited the plants at intervals.

In 1913 a physical examination was made under the direction of Dr. George M. Price, then director of investigations of the New York State Factory Investigating Commission and one of the union's representatives on the board, of workers in a number of trades, including about 800 garment workers. The high incidence of pulmonary tuberculosis disclosed among the garment workers led to a campaign among the New York locals of the union to introduce tuberculosis benefits, and three locals did so in quick succession, one of these also arranging for the examination of candidates for admission to the union to determine whether they were tubercular, the examination being made by the joint board.

Since that time the work of the board has grown and its jurisdiction has expanded. As already stated, it very early undertook shop-inspection work, and this has continued to be one of its main functions. It also helped to establish the practice of fire drills, to establish first-aid service in the shops, and to promote a nursing service. It has printed a number of special bulletins on sanitary problems in the industry and has conducted educational work in regard to health.

The "protocol" was abandoned in 1916, but the joint board of sanitary control was retained and has been continued even in times of strike or lockout.

The example set by the industry in New York City was followed in Boston in April, 1926, by the setting up of a similar joint board. The difficulties encountered in this industry are indicated by the fact that while at the time of setting up the board 109 shops belonged to the board, during the first year 31 of these went out of business and were replaced by new firms. Originally the board functioned only for the cloak and dress branches of the trade, but in September, 1927, the raincoat manufacturers also became signatories to the agreement. A sanitary and safety code was drawn up and inspections began. That unsanitary and unsafe conditions have by no means been eliminated in the industry even yet was indicated by the fact, revealed by the first inspection, that of the shops party to the agreement two-thirds had inadequate supplies of even the simplest medical emergency supplies, one-fifth had toilets which were in an "unspeakable condition," one-sixth had the doors to the fire exits locked, one-third had unshaded lights, and the common drinking cup and towel were "almost universal." As a result of the first year's work of the board there has been "an unmistakable improvement in sanitary conditions" in Boston.

Prosanis label.—Although the unions and employers had undertaken the joint board with the idea of cooperative effort in raising

the sanitary and safety standards in the industry, the desirability was felt of the retailer's also assuming a "share in the responsibility for the maintenance of decent sanitary conditions and labor standards in the industry." This the union began to urge as early as 1913.

Various methods of accomplishing this were tried but none proved satisfactory. The New York governor's commission of 1924 recommended the adoption of a "sanitary label" which would be a guaranty that the garment to which it was attached had been produced under "enlightened sanitary and labor conditions." The recommendation was received with favor, and the agreement signed by employers and union in the New York market incorporated a provision adopting the "prosanis label" for garments produced under the agreement.

In order to be granted the use of the label the employer must see to it that the sanitary conditions in his shop conform to the joint-board standard, and he must have an active agreement with the International Ladies' Garment Workers' Union.

At the end of 1925 the label was being used by 2,176 shops, of which 1,331 were in the cloak industry and 845 in the dress industry. During the period of disorganization in the international union, the label fell into disuse to some extent, but active steps are now being taken to revive its general use. It is now being introduced into the women's garment industry of Boston.

Pocketbook Industry

The agreement between the International Pocketbook Workers' Union and the Associated Leather Goods Manufacturers, effective from July 21, 1926, to May 1, 1929, provides for the establishment in the industry of a joint board of sanitary control composed of four members, two representing the employers and two the union. Thus far, however, no steps have been taken to establish the board, due, the manager of the union states, "probably to the fact that with very few exceptions the sanitary conditions in our shops are pretty good, particularly so in the shops of the members of the association."

Printing Trades

Conditions have greatly improved in the printing trades. Due to unsanitary conditions in the shop, the incidence of tuberculosis and of lead poisoning among workers in these trades was formerly very high. As a result of long years of effort, however, great improvement has been made in lighting conditions, ventilation, and cleanliness, much of the credit for which must be given to the printing-trades unions.

A study made by Dr. Frederick L. Hoffman in 1923 and 1924, with the cooperation of the employers and unions in the printing trades and the United States Bureau of Labor Statistics revealed general health conditions unexpectedly satisfactory. Sanitary inspections revealed only minor defects, mainly in old plants. Tuberculosis, the returns indicated, "is no longer a menace of serious proportions in the industry," and lead poisoning occurred far less frequently than had been anticipated.¹

¹ U. S. Bureau of Labor Statistics Buls. Nos. 392, 426, and 427.

The committee on sanitation of typographical union, local No. 101, has recently reported upon its study of conditions in the printing trades in 1927. This report points out the "marked improvement" which has taken place in the industry. The ailments now found among printers are "such as would normally be expected among any group of aged workers, and are not peculiar to the printing business." The rise in the wage level and in living standards which has taken place since before the war has had "an unquestionable bearing upon the present health situation, which is in marked contrast to that found in earlier investigations, representing a time when shop conditions were far less satisfactory, when practically no serious attention was given to sanitation and ventilation, when wages were low and hours were long."

Efforts to Safeguard Members' Health

THE Atlantic City convention of the American Federation of Labor directed its committee on education to further the work of trade-unions in promoting the health of their members. A survey by the committee disclosed, it is reported, that a number of unions had adopted constructive measures along this line. Because of the scarcity of data on causes of sickness and death among industrial workers, the committee has been urging local unions to assist in the collection of such information by keeping records of sickness among members. The work is being done with the cooperation of the United States Public Health Service.

The measures taken along the line of general health work for members include specific medical service of various sorts to the members, educational work along health or medical lines, and the encouragement of sports and outdoor recreational activities by the locals. Many unions either have a regular health or medical section in their official magazine or run occasional articles either of general interest or on some specific phase of medicine; these include the periodicals of the flint-glass workers, the photo-engravers, the locomotive engineers, the broom and whisk makers, and the stone-cutters.

Ladies' Garment Industry

Union Health Center.—The results of a dental examination of 3,110 workers carried on by the United States Public Health Service in the offices of the joint board of sanitary control in 1914, disclosed such need for dental care that, with the cooperation of the local unions of the International Ladies' Garment Workers' Union, a medical and (later) a dental division were created in the joint board, for the benefit of workers in the industry.

Early in 1919, however, the locals which were supporting the medical and dental clinics decided to separate them from the board and formed them into an association, the Union Health Center Association. A building was purchased and remodeled at a total cost of more than \$80,000, and into this the medical and dental departments were moved.

The growth of this Union Health Center is characterized as "the most interesting development [in the unions] since 1919." The number of cases handled increased from 6,631 in 1920 to 29,380 in 1926, while the number of dental patients rose from 1,555 to 5,588.

As at present organized the Union Health Center is a cooperative association of the nine local unions of the international in New York City. These unions, with a membership given as approximately 45,000, own the building in which the medical center is housed and the equipment. The center is managed by a board of nine directors, one from each of the nine locals. Dr. George M. Price is the executive director.

The purpose of the center is stated to be (1) to give information on health matters, (2) to give physical examinations to applicants for membership in the union and to members claiming sick benefits, and (3) to give such treatment as may be necessary. Originally the services of the center were restricted to members of the international union. Lately, however, the center has been thrown open to all members of labor unions.

To aid in the dissemination of health education, a health information bureau has been established, and workers are encouraged to seek information on all questions relating to disease and general health matters. There is also the life-extension branch of the center which arranges for physical examinations to be given by a number of physicians to groups desiring such service. The medical department not only gives general medical examinations of patients but will also arrange for special examinations and treatments by specialists along various lines. The center has a well-equipped X-ray department, laboratory, physiotherapeutic department, and a drug store at which patients may have their prescriptions filled at nominal rates. General clinics are held five days a week and in addition there are special clinics, including surgical, nose and throat, gastric, gynecological, eye, skin, nerves, orthopedic, and proctological clinics, specialists in each branch being engaged for the purpose. New services include analytical laboratory work and a clinic for the treatment of diabetes, kidney trouble, goiter, and overweight.

The work of the dental clinic expanded to such an extent that sufficient space could not be provided in the original building, and this department was therefore moved in 1924 to rented quarters in another building, where it now occupies an entire floor. The dental clinic has 4 dental units and employs 4 full-time dentists at hourly rates, and 18 others on a part-time basis, the latter coming in for the rush period in the evenings.

Both departments are handicapped by the fact that most of the patrons are at work during the day and must have their medical and dental work done in the evening and that much of the equipment necessary to care for all these must be maintained in idleness in the daytime. The dental department is now endeavoring to eliminate this source of waste by increasing its work among the children of the workers during the daylight hours.

The medical and dental departments are operated on different financial bases. In both cases only competent physicians and dentists are engaged. In the medical department a flat charge of \$2 is made for examinations of applicants for union membership, of \$1 for examinations of claimants for sick benefits, and of \$1.50 for special examinations, the charges in the first case being paid for through the local union. Certain local unions also have, as part of their benefits, allowed their members some medical treatment and have given

financial support to the health center. The result has been to link up the medical department rather closely with the locals, so that it has also been more or less affected by the conditions in the trade and in the local organization. Up to 1926 there was usually a surplus of income over expenditure. Since, then, however, due to conditions in the union the medical department has suffered and has experienced a deficit. The dental clinic, on the other hand, has always been run on a strictly self-supporting basis, the charges being based upon the cost of the work. The factional troubles within the union, with the consequent financial difficulties, and the reduced incomes of the workers because of the strike affected both medical and dental departments, but the former much the more seriously. In order to tide over the emergency, the center issued "health certificates" entitling the holder to medical attention, to the amount of \$35,000, in denominations of \$1, \$2, and \$5.

A plan was also adopted of affiliation of other unions with the center. Under this plan a union desiring to affiliate pays a fee varying according to its membership. For an organization of from 300 to 500 members the fee is \$100 a year; above this membership the fee increases \$50 for every 500 members, subject to a maximum of \$500. These fees entitle the members of the affiliating union to medical attention at nominal rates and the union to representation on the board of directors of the Union Health Center. A great many unions of various trades have affiliated to the center under this arrangement. It is hoped also to make the center the recognized examining agency for various unions in New York City which require such examination in order to receive benefits, tuberculosis treatment, etc.

Men's Clothing Industry

Near the end of 1926 the Cincinnati locals of the Amalgamated Clothing Workers inaugurated a new service. They entered into an agreement with a local health agency known as the Industrial Health Conservancy Bureau, effective for six months, under which, in consideration of the payment of "a reasonable fee" by the union, its members were to be entitled to medical examination and treatment. The results were so satisfactory that the agreement was renewed and the scope of the work expanded.

Arrangements are made whereby union members receive a careful medical examination and advice on health matters. This is done at the doctor's office, at the shop, or at the union office. Treatment is given in certain cases, but others are referred to specialists or to the family physician for further or special treatment. Whenever a case is referred to a specialist arrangements are made with him for a nominal fee only to be charged.

The union emphasizes the preventive aspect of this service, pointing out to its members that it is above all a "health" department and that the member should not wait until he is sick before being examined. Examination of the first 64 persons treated disclosed a number of diseases or defects the existence of which the patient had not suspected. During the period from October, 1926, to April 1, 1928, some 2,300 treatments had been given through this service, not including many cases in which physical examinations were given but the

patient was referred to his own physician for treatment. No definite health work has been undertaken in New York City, but members needing medical attention are referred to the Union Health Center of the International Ladies' Garment Workers' Union.

Announcement was made in the October 12, 1928, issue of *The Advance* that these Cincinnati unions have decided to install a dental clinic in the headquarters of the joint board.

In Chicago, the local unions have just erected a new building which contains not only offices but also many community features, including a dental clinic with room for 10 chairs and a department for an X-ray laboratory.

Health Work of Locomotive Engineers

Organizations which have benefit or insurance features gradually accumulate a wealth of data as to the causes of sickness and death, the diseases to which the members are especially subject, etc., study of which may yield indications of conditions in the trade which need to be remedied or of special unavoidable disabilities for which treatment should be given or benefits should be paid. Thus, officials of the insurance department of the Brotherhood of Locomotive Engineers found that a large number of the death claims presented to the department were for deaths from preventable diseases which could have been discovered by periodical examination. Analysis of the causes of the deaths occurring over the period of a year showed that organic heart disease, Bright's disease, diabetes, apoplexy, cerebral hemorrhage, hardening of the arteries, and uremic poisoning were the leading causes of death, and that "47 per cent of the deaths could have been prevented and the lives of those members prolonged for some time—in some instances for many years—had they known earlier that they were suffering from disease."

As many of these diseases were those which could have been detected by urinalysis, the brotherhood made arrangements with an established health service to supply periodic examinations.

Acceptance of the service is voluntary. Each participating member pays \$5 a year, receiving for this fee a urinalysis every three months. (His family may also have the benefit of such service, children under 18 being charged for at the rate of \$2.50 for semi-annual examinations.) Each time the examination is made a report is sent to the member stating whether his condition is normal or abnormal and, if the latter, what should be done to correct the condition.

The brotherhood reports that a large percentage of the membership is taking advantage of this service.

A regular health department has been established in the *Locomotive Engineers' Journal* to which members desiring medical information on specific points may write, the answer being printed so that all may have the benefit of it.

Printing Trades

Tuberculosis and lead poisoning have been found to be the outstanding diseases to which printing-trades workers are subject. This was especially true in the early days before improvements in shop conditions and sanitation were introduced. So prevalent was tu-

bercubosis among the men employed in printing establishments that the International Typographical Union, which originally held jurisdiction over all the printing trades, undertook the care of its members who were afflicted with the disease. This practice has been followed by the various printing trades as they broke away from the parent organization; and to-day care for tuberculous members is found more generally in the printing-trades unions than in those of any other industry, with the possible exception of the clothing industry.

The printers' and the printing pressmen's international unions each have a tuberculosis sanatorium and the locals of the International Stereotypers and Electrotypers' Union support a small home where the tubercular members receive treatment. Cash benefits and a medical examination are provided by the photo-engravers' union.

Largely because of the findings of various health surveys of the printing trades, which brought out the need of interesting these workers in outdoor activities to counteract the fumes and dust in printing plants, baseball teams were started by typographical locals and in 1908 these were organized into the Union Printers' Baseball League. Later golf and bowling groups were formed, with the same underlying idea. At the annual tournaments of these groups lectures are given pointing out the benefits of sanitation, athletics, and general hygiene, and their effect upon health.

Even as early as 1909 the president of the International Photo-Engravers' Union pointed out that "a glance at our mortuary reports should suffice to convince members that every precaution possible should be taken by us to stamp tuberculosis from our ranks." He indorsed the recommendation of the union's shop committee as to the desirability of compulsory physical examination of apprentices, but no action was taken as to this until 1915. The convention of that year passed a law requiring any member suspected of having tuberculosis to submit to a physical examination, which should be paid for by the union. Under this law, a member found to have tuberculosis is forbidden to return to work, but must take treatment for the disease, the union allowing him benefits of \$15 per month. The measure was adopted in the interests both of the member himself and of his fellow workers. The international urges its locals to report to it all unsanitary shop conditions, and recommends that each local form a shop committee whose duty it shall be to see that the working conditions are good. In 1921 the executive council was instructed to refuse its approval to any local agreement which did not contain a provision for proper lighting and ventilation.

Family Allowances in the Civil Service of Foreign Countries

THE practice of granting supplementary salary allowances to married employees with children is in force in the civil service of at least 23 foreign countries, including most of the countries of Europe. The essence of this practice is that the married employee with a family to support receives more than a single employee without family responsibilities. Under the family-allowance system a basic salary is established for each position just as would be done under any salary system. This is the amount paid to an unmarried worker, but a married employee with family responsibilities filling the same

position receives an addition to the basic salary, the amount added being proportional to the number of his dependents.

Family allowances are also in use to some extent in private industry, and were quite widespread in the abnormal and rather chaotic economic situation following the war. Since the return to stabilized currencies and more normal economic conditions, family allowances in private industry have apparently tended to decrease in importance, except in France and Belgium. The declining importance of family allowances in private industry is probably ascribable to certain factors which are not applicable to public employment. Thus, in many countries, organized labor is opposed to the family-allowance system in private industry. This opposition rests on several grounds, notably the fear that employers using the system will discriminate against married employees and the fear that the existence of the system may weaken the bargaining power of the organization. These objections are less important in the case of Government employment, where there is usually little danger of discrimination against married men and where salaries are fixed by the Government and not by collective bargaining.

The principal argument advanced in favor of the family-allowance system in Government employment is that it solves the old problem of the married worker with a large family. The basic salary is established according to the supposed difficulty of the job. The incumbent, if without dependents, receives this base salary. If there are dependents the salary is increased, usually in proportion to the number of dependents.

Under the straight salary system, the argument continues, the worker with dependents usually suffers. The salary of a job may be sufficient to allow a single employee to live in fair comfort but insufficient to support a worker with several dependent children. On the other hand, to fix a salary for such a job at a point which would take care of the case of an employee with a large family might necessitate a salary disproportionate to the character of the work. Also, it is claimed that the system encourages promotion strictly by merit, as the appointive official is no longer under the human temptation to favor in promotion the employee who has heavy family responsibilities at the expense of another employee who may be more efficient but who has fewer family responsibilities.

The United States Bureau of Labor Statistics has made no first-hand investigation of family allowances since the publication, in 1926, of its Bulletin No. 401, which embodied the results of a survey made in 1924 on that subject.

Recent data, however, concerning the payment of family allowances in various foreign civil services are given in a report of the International Labor Office submitted to the March 19, 1928, session of the child welfare committee of the League of Nations Advisory Commission on the Protection of Children and Young Persons. The present article is based mainly on these data and certain other reports published in 1927 and 1928¹ supplemented in some cases, where later information was not available, by figures from earlier documents.

¹ League of Nations, Advisory Commission, Child Welfare Committee, Fourth session, March 19, 1928, Report by the International Labor Office on family allowances in relation to the physical and moral well-being of children, Feb. 28, 1928 [Geneva, 1928]; Minutes of the third session, held at Geneva, May 2-6, 1927, and report, Geneva, July 15, 1927; Monthly notes of the Family Endowment Society, London (various 1927 and 1928 issues); The International Trade-Union Movement, Amsterdam, March, 1927; U. S. Bureau of Labor Statistics Bul. No. 401; and Labor Review, October, 1925, p. 65.

Countries in Which the System is Established

FAMILY allowances are being paid in the State civil services of the following 24 countries:² Australia, Austria, Belgium, Bulgaria, Czechoslovakia, Estonia, Finland, France, Germany, Greece, Hungary, Irish Free State, Italy, Latvia, Lithuania, Luxemburg, Netherlands, Poland, Scandinavian countries (Denmark, Norway, and Sweden), Spain, Switzerland, and Yugoslavia.

Period at Which Systems were Introduced

THIRTEEN of the 24 countries instituted the system during the World War, while in France such grants were made in the Ministry of Finance as far back as 1900 and in Finland teachers were receiving allowances of this kind prior to 1909. The dates of establishment for 9 other countries are as follows: 1912—Hungary and the Netherlands; 1920—Australia, Belgium, and Estonia; 1922—Lithuania; 1923—Yugoslavia; 1925—Irish Free State; 1926—Spain

Methods of Paying Allowances

THERE is great lack of uniformity in the provisions of different countries in the matter of making these grants for family responsibilities. Among these provisions are allowances for married men regardless of the number of children, for children only (but frequently including illegitimate, adopted, foster, and stepchildren), for both wives and children, for women with dependent children, and for aged parents, sisters, and brothers; allowances on an hourly, daily, weekly, monthly, or annual basis; allowances in the form of a higher wage; allowances as a percentage of the basic wage or as part of the cost-of-living bonus; grants to all employees with family responsibilities; grants only to workers and employees in the lower wage or salary groups; allowances for all children, or for a certain number of children, or beginning with the third child, or in the case of Spain with the eighth.

The age limit set for children's eligibility for allowances varies, ranging from under 14 to 24 years or more. The grants for children in the higher age group are usually made under specified circumstances, for example, because these children are continuing their education or are suffering from physical or mental disability which prevents them from earning a living.

Amount of Allowances

THE allowance rates vary greatly from country to country and sometimes increase or decrease according to whether the child is the second, third, or fourth in the family, at other times changing with the age group to which the child belongs, and in some countries with the salary or civil-service grade of the head of the family, the allowances, for example, in the lower grades in Poland for a family

² Twenty of these countries were reported as having such a system in documents published in 1927 and 1928. Finland, Lithuania, Luxemburg, and Rumania had such a system in 1924, according to Bulletin No. 401 of the United States Bureau of Labor Statistics. The Minister of Labor of Rumania recently reported that he knew of no system of family allowances. It is assumed these grants are still being made in the other three countries. The information for the Irish Free State is for 1925.

with three children being equivalent to about 41 per cent of the salary. In Norway allowances must not exceed 11 per cent of the salary, while in the Netherlands the allowance for each child is equivalent to only 3 per cent of the salary. The rates and regulations concerning these grants are given below for the majority of the Government services in which family allowances are paid:³

Australia.—Employees whose salaries are less than £500 (\$2,433.25) per annum are paid 5s. (\$1.22) per week for each child under 14 years of age.

Austria.—Officials who are married or widowed receive annually 60 schillings (\$8.44) as household allowances and additional allowances of 60 schillings for one child, 180 schillings (\$25.33) for two children, and 120 schillings (\$16.88) for each subsequent child. The children must be legitimate, dependent, and under 21 years of age, but this age limit may be extended when beneficiaries are taking advanced courses of instruction. State "aid" to the extent of 60 schillings (\$8.44) per annum is granted for one or more dependent adopted, or illegitimate children. There are, however, certain classes of officials to whom allowances are paid in the form of percentages of their salaries. For allowances to Government manual workers the rates in general conform to those for similar grants made in private undertakings in collective agreements.

Belgium.—Officials and employees are granted 30 francs (83 cents) per month for the first child and 50 francs (\$1.39) for each subsequent child.

Bulgaria.—Married officials are granted 80 leva (58 cents) per month more than single officials and 80 leva per month for each child. When husband and wife are both in civil service the allowance rate is modified.

Czechoslovakia.—Intellectual workers are granted 1,800 Czechoslovak crowns (\$53.33) per annum for one dependent child and 3,000 crowns (\$88.88) per annum for several dependent children, ordinarily until they reach 18 years of age, or 21 years of age if they are taking a regular course of study. Persons on the Government staffs whose work is mainly manual receive 1,200 crowns (\$35.55) per annum for one dependent child and 2,100 crowns (\$62.22) for several dependent children.

France.—In 1927 all the members of the Government personnel were receiving annual allowances of 604.80 francs (\$23.71) for the first child, 806.40 francs (\$31.61) for the second child, 1,209.60 francs (\$47.42) for the third child, and 1,411.20 francs (\$55.32) for the fourth and each subsequent child. The above allowances are granted until the child is 16 years of age or until 18 years of age if the child holds a signed apprenticeship contract or until 21 years of age if he is following a regular course of study.

Germany.—In 1927 officials were being paid the following monthly allowances: For a wife, 12 reichsmarks (\$2.86); for each child under 6 years, 18 reichsmarks (\$4.29); for each child 6 to 14 years, 20 reichsmarks (\$4.76); for each child 14 to 16 years, 22 reichsmarks (\$5.24). The grants for children are made until they are 21 years of age if they

³The conversions into United States currency are based on par value in those countries in which the exchange rate is at or near par. In a few countries in which the January, 1928, rate is very much lower than the par value the conversion is made on the exchange rate at that date.

are not capable of earning or are earning less than the amount of the allowance. The grants are made to woman officials only when they are the sole supporters of their children. Employees other than officials receive 3 pfennigs (0.7 cent) an hour for a wife and for each child who has not yet reached the age of 16.

Greece.—Fathers receive an amount equivalent to from 5 to 10 per cent of their salaries for each child under 18 years of age and for unmarried daughters beyond that age. The allowances, however, are not paid for more than 5 children.

Hungary.—Officials and "employees" are granted allowances for wives, legitimate or adopted children, dependent fathers and mothers, and legitimate orphan grandchildren, in accordance with the following monthly scale per family member: First group (age limit for children 24 years), 13.60 pengő (\$2.38); second group (age limit for children 16 years), 12.40 pengő (\$2.17); third group (age limit for children 16 years), 11.20 pengő (\$1.96); fourth group (age limit for children 16 years), 9.60 pengő (\$1.68). The age limit of 16 years may be extended to 24 years when the children are successfully carrying on their studies.

Italy.—According to decree law No. 694, of May 7, 1927, cost-of-living bonuses were paid to the civil service personnel, based on the size of the family and varying with the grade of employment; for example, in the higher grade 67 lire (\$3.52) per month for a married man with one child or a widower with two children, and in the lower grade for a family of a similar size, 117 lire (\$6.15); in the higher grade for a married man with six children or a widower with seven children 141 lire (\$7.42), and in the lower grade for a family of the same size 243 lire (\$12.78). Where the children exceed seven the rates rise in proportion to the number. In the January, 1928, issue of Monthly Notes of the Family Endowment Society, however, it is stated that the cost-of-living bonus, including the children's allowance, has been abolished for the higher salary grades, but is still being paid in some of the lower grades. The amounts have been considerably reduced and "it is probable that the bonus and the children's allowance will be abolished entirely in due course."

Netherlands.—Officials in various ministries and departments and in the postal, telegraph, and telephone services receive an amount equivalent to 3 per cent of their salary for each child under 18 years of age, the minimum being 60 florins (\$24.12) and the maximum 240 florins (\$96.48) per child per annum. Manual workers are usually paid 1.15 florins (46 cents) per child a week. Employees in higher grades receive more substantial grants. The wages of skilled Government workers range between 30 and 36 florins (\$12.06 and \$14.47) per week and of unskilled and semiskilled between 24 and 30 (\$9.65 and \$12.06) florins.

Norway.—With few exceptions, officials, including those on the telegraph, telephone, and railway staffs, receive 60 kroner (\$16.08) per annum for each dependent child under 18 years of age, provided the allowances do not exceed 11 per cent of the salary and that the salary plus the allowances does not exceed 4,500 kroner (\$1,206) per annum. Workers in undertakings operated by the State are paid 0.05 krone (1.3 cents) per hour per child.

Poland.—Government railway workers, both men and women, receive cost-of-living bonuses varying according to the number of dependents, which include the wife unless she also is in the Government service, a totally incapacitated husband, legitimate and acknowledged children, and other dependent children under certain circumstances. In general, the age limit is 18 years, which is extended to 24 when children are studying or are not able to work. The number of dependents for whom grants can be made is limited to five. In 1927 the allowance rate per family member was 19.81 zlotys (\$2.22) per month. Officials of the higher grades are paid allowances under a similar system, the allowance per dependent being the same for all salary grades—20.81 zlotys (\$2.33). In the lower grades the grant is equivalent to about 41 per cent of the salary when the family has three children, while among the higher officials the proportion ranges from 15 to 25 per cent.

Spain.—Both men and women who are maintaining more than 10 children are granted a bonus equivalent to a certain proportion of their salary—from 5 per cent for 11 children to 50 per cent for 20 children. The civil-service personnel also benefit under the provision granting allowances for families with eight or more legitimate or legitimated children and who are entirely dependent upon earnings amounting to less than a specified sum.

Sweden.—Government employees are still being granted family allowances, officials in certain ministries receiving a cost-of-living bonus of 4 kronor (\$1.07) a month for each dependent child under 16 years of age.

Switzerland.—Officials, employees, and laborers are entitled to 120 francs (\$23.16) per annum for each child under 18 years of age, including acknowledged and adopted children, children by another marriage, and under certain circumstances illegitimate children. Married officials also receive a locality cost-of-living allowance which is 25 per cent higher than that accorded single officials.⁴

Yugoslavia.—Men and women in the civil service receive annual allowances of 360 dinars (\$6.35) for each child up to 6 years of age, 600 dinars (\$10.58) from 6 to 12 years of age, and 960 dinars (\$16.92) for those over 12 years of age. The last-mentioned grant is made until the children reach their majority, or is discontinued at an earlier age if they are self-supporting. The age limit is extended to 23 years for those taking higher courses of study or in the military service.⁵ Allowances to women in the civil service are paid only when the fathers of the children have insufficient means or are unable to work.

Other Public Services

BASED on information in reports published in 1927 and 1928 the following 12 countries pay family allowances in certain public services other than those of the State (provincial, district, communal or municipal): Austria, Belgium, Estonia, France, Germany, Latvia, Netherlands, Norway, Poland, Spain, Sweden, and Switzerland. The countries listed below were granting family allowances in their

⁴ League of Nations. Advisory Commission for the Protection and Welfare of Children and Young People. Child Welfare Committee. Fourth session, March 19, 1928. Geneva, 1928, pp. 16-19.

⁵ According to Bulletin No. 401 of the United States Bureau of Labor Statistics, other allowances were also granted for wives and children but the later report does not mention these grants.

municipal or communal services in 1924, according to Bulletin No. 401 of the United States Bureau of Labor Statistics: Bulgaria, Czechoslovakia, Denmark, Hungary, Italy, Luxemburg, and Yugoslavia. In the reports, however, on which this article is based, these countries are not specifically included among those having family allowances in such services.

Attitude of Personnel

A HIGHLY important aspect of the system of family allowance is the attitude of the public service staffs toward these grants. Some recent expressions in this connection are here presented from 1927 and 1928 issues of Monthly Notes, published by the Family Endowment Society (London):

Australia.—Mr. Hunt, the public-service arbitrator, said before the Australian Royal Federal Commission on Child Endowment "that the system of child endowment in the civil service met with universal approval. Some of the younger men might envy the greater income of the married men but they had not given any very emphatic expression to that view. No doubt this was because they felt that there was a possibility of their being married some day."

Austria.—The Federation of Austrian Public Service Employees (*Bund der Öffentlichen Angestellten Oesterreichs*), Vienna, covering approximately 39,000 members, states:

Our association is of the opinion that the special needs of the family can not be taken into account through allowances alone. (1) A real improvement in the position of the married official compared to the unmarried who does the same work is considered unjust by the latter. (2) Since high allowances are paid without service in return, eventually the position of the married in the labor market will be injured and the service will suffer by the restrictions of the freedom of officials on financial grounds. The allowances paid in Austria to-day are still very little financial help to the family. A satisfactory position can only be reached, in our opinion, by the introduction of a general scheme of family insurance to which employees (public and private) and employers would contribute and by which family income would be made independent of work income (analogy of sickness insurance).

France.—The National Federation of Civil Service Unions (*Fédération National des Syndicats de Fonctionnaires*), Paris, covering approximately 200,000 members, "considers the system of family allowances necessary," but the organization also makes the following observation:

Up to now the application of the system has not had a serious effect on the salaries of unmarried officials. But a tendency is shown (which we oppose) to increase family allowances instead of improving rates of salary. We consider that it is a question of two things which are in a totally different class. Salary is the reward of work and must be high enough to allow a good flow of entrants into the service. Family allowances are a help and an encouragement to large families; they should be independent of salary and should not influence it, and we even consider that being of this nature they should be extended to all our fellow citizens.

Germany.—The German Federation of Civil Servants (*Deutscher Beamtenbund*) reported that the opinions of its membership was divided on the question of family allowances, the majority, however, wished "the same salary without allowances when the family is not larger than four persons (man, wife, and two children). The German General Federation of Employees (*Allgemeiner Deutscher Beam-*

tenbund), Berlin, together with the first-named German federation, covers approximately a million members. The latter organization declares that it does not approve of the family-allowance system, being in favor of payment by results. "In the existing form, allowances are as alms, while we demand for officials a sufficient salary fixed at an amount which will mean a fair living to married people with two or more children."

Netherlands.—The Netherlands General Christian Union of Civil Servants (*Algemeene Nederlandshe Christelijke Ambtenaarsbond*), with about 2,700 members, takes the following position:

The trade-union of which the undersigned is secretary is in favor of children's allowances. Generally speaking, our experience is that where no children's allowances are paid salaries are fixed at such amounts as mean a fair living to unmarried or childless people only. It has been maintained that people with a numerous family might not find a situation, children's allowances in such cases being too heavy a burden for their employers. However, it would seem to us that this is rather a theoretic point of view. Nevertheless, in order to meet this objection a special scheme of insurance has been elaborated of late. Under this scheme employers are to pay a fixed premium for each of their employees, the total amount of premiums thus collected being set apart for a special fund from which employees receive children's allowances. In this way the risk of unemployment is most effectively dealt with, employers no longer being interested in the number of children of their employees. In principle a fund of this kind has been recently instituted and the municipality of Arnheim has already adhered. Other municipalities and Provinces as well as private employers may likewise join in this action.

Switzerland.—The representative of the Swiss Federation of Municipal and State Workers (*Verband der Personals Öffentlicher Dienste*) does not approve of the family-allowance system but believes in the principle of payment by results.

The German Federation of Labor—Its Strength and Organization

By FRITZ KUMMER, STUTTGART, GERMANY

THERE are three great groups of free, socialist unions in Germany—those of agricultural and industrial workers, salaried employees, and Government officials—each of which has its separate federation. Their membership is as follows:

| | Unions | Members |
|---|--------|-------------|
| General Federation of Labor..... | 38 | 4, 415, 689 |
| General Federation of Salaried Employees..... | 14 | 411, 766 |
| General Federation of Government Officials..... | 23 | 180, 000 |
| Total..... | 75 | 5, 007, 455 |

The three organizations are on the friendliest of terms. There is perhaps not a single question of general importance which is not jointly discussed or made a common cause. At the convention of one, the others are represented by delegates. This close cooperation is also to be found among the membership and on the floors of the factories.

The German Federation of Labor, the organization of agricultural and industrial workers, is not only the oldest of the three, but from the economic point of view the most important. It came into existence in the year 1891 with a membership of 277,000 distributed among 62 trade-unions. During the 37 years of its existence, leaving out of

consideration the war and inflation period, it has enjoyed a fairly regular growth. Its highest level in membership was reached in the year 1922 with 7,895,000, which number shrank to 3,932,000 during the period of inflation and unemployment, the low level occurring in 1926. With the improvement in economic conditions the membership again increased. At the beginning of 1928 it reached the figure of 4,415,689 and since then, according to all reports, has further increased.

While the membership of the German Federation of Labor has increased more than tenfold since 1891, the number of unions has decreased from 62 to 38. If one may read aright the signs of the time, this number may still experience a further reduction and the slogan "more union members and fewer unions" may become more serious than ever before; every attempt is being made to bring this to realization. Now, as before, attempts are being made to bring related trades or industries under a single organization. The following table shows the membership of the 38 unions which compose the federation.

MEMBERSHIP OF GERMAN FEDERATION OF LABOR, 1926 AND 1927, BY UNIONS

| Union | Number of members | | | | Number of local groups |
|---|-------------------|-----------|---------|-----------|------------------------|
| | 1926 | 1927 | | | |
| | | Male | Female | Total | |
| Building workers..... | 339,159 | 401,868 | 384 | 402,252 | 602 |
| Clothing workers..... | 69,737 | 38,829 | 35,247 | 74,076 | 223 |
| Miners..... | 184,275 | 194,524 | 216 | 194,740 | 1,581 |
| Coopers..... | 8,040 | 7,979 | 163 | 8,142 | 134 |
| Bookbinders..... | 48,853 | 17,368 | 35,819 | 53,187 | 165 |
| Printers..... | 80,477 | 81,305 | ----- | 81,305 | 849 |
| Roofers..... | 9,200 | 10,691 | ----- | 10,691 | 276 |
| Railway employees..... | 210,568 | 231,997 | 1,371 | 233,368 | 983 |
| Factory laborers..... | 375,935 | 329,057 | 94,002 | 423,059 | 532 |
| Fire fighters..... | 7,896 | 7,940 | ----- | 7,940 | 106 |
| Film operators..... | 1,273 | ----- | ----- | ----- | ----- |
| Butchers..... | 14,018 | 14,068 | 2,575 | 16,643 | 129 |
| Barbers..... | 3,850 | 3,500 | 439 | 3,939 | 56 |
| Gardeners..... | 9,117 | 8,391 | 1,149 | 9,540 | 38 |
| State and municipal workers..... | 207,917 | 193,278 | 35,244 | 228,522 | 881 |
| Printers' assistants..... | 36,433 | 13,800 | 25,207 | 39,007 | 211 |
| Wood workers..... | 266,055 | 273,372 | 20,463 | 293,835 | 1,172 |
| Hotel and restaurant employees..... | 23,032 | 18,643 | 6,440 | 25,083 | 120 |
| Hatters..... | 17,217 | 6,579 | 11,599 | 18,178 | 47 |
| Coppersmiths..... | 6,296 | 6,735 | ----- | 6,735 | 100 |
| Agricultural workers..... | 141,778 | 135,120 | 17,760 | 152,880 | 152 |
| Food workers (<i>Lebensmittel</i>)..... | 68,967 | 69,847 | 4,596 | 74,443 | 352 |
| Food workers (<i>Nahrungsmittel</i>)..... | 51,512 | 29,435 | 23,145 | 52,580 | 173 |
| Leather workers..... | 36,191 | 30,644 | 7,541 | 38,185 | 265 |
| Lithographers..... | 22,463 | 23,200 | 12 | 23,212 | 139 |
| Painters..... | 42,643 | 48,528 | 218 | 48,746 | 1,031 |
| Machinists (engineers)..... | 43,605 | 46,331 | 28 | 46,359 | 33 |
| Metal workers..... | 675,398 | 758,507 | 57,331 | 815,838 | 604 |
| Musicians..... | 21,057 | 22,309 | 555 | 22,864 | 268 |
| Saddlers, upholsterers..... | 27,370 | 24,695 | 4,923 | 29,618 | 177 |
| Chimney sweeps..... | 2,772 | 2,884 | ----- | 2,884 | 63 |
| Shoemakers..... | 71,113 | 43,693 | 34,214 | 77,907 | 247 |
| Porters or doorkeepers..... | 11,116 | 10,950 | 98 | 11,048 | 420 |
| Stonemasons..... | 54,489 | 63,393 | 405 | 63,798 | 653 |
| Tobacco workers..... | 58,958 | 16,612 | 54,767 | 71,379 | 442 |
| Textile workers..... | 284,773 | 126,626 | 174,044 | 300,670 | 282 |
| Transportation..... | 313,096 | 320,882 | 30,553 | 351,435 | 540 |
| Carpenters..... | 86,313 | 101,601 | ----- | 101,601 | 946 |
| Total..... | 1 3,932,935 | 3,735,181 | 680,508 | 4,415,689 | 15,932 |

¹ As given; items add to 3,932,962.

Had the film operators' union made a report for 1927, the totals for that year would show some, although little, increase. The above table shows membership increase of 482,754 for 1927 over the year 1926. The income rose correspondingly from 148,139,000 to 182,252,000 marks, or an increase of 34,113,000 marks. This income includes contributions, which in 1926 amounted to 137,638,000 marks and in 1927 to 169,613,000 marks.

Expenditures have diminished in spite of the increase in membership. This is due in the main to the decrease in unemployment benefits, although there was an increase in expenditures in almost all other kinds of relief, as the following statement shows:

| | 1926 Marks | 1927 Marks |
|------------------------------------|---------------|---------------|
| Total expenditures..... | 135, 529, 000 | 129, 463, 000 |
| For relief..... | 62, 064, 000 | 40, 965, 000 |
| For strikes..... | 6, 100, 000 | 11, 358, 000 |
| For press and education..... | 7, 116, 000 | 8, 834, 000 |
| For propaganda and convention..... | 21, 653, 000 | 25, 107, 000 |

The contributions mentioned above are of three kinds—i. e., regular, special, and local. The two last mentioned are not to be found in all unions and are often of temporary nature. The special contributions are levied only now and then for special purposes, usually during an important strike. The local contributions serve only to strengthen the relief funds for the local groups. Of the regular contributions a certain portion, say, 20 per cent, is allotted to the local groups. However, should this amount be insufficient because of unusual expenditures by the local groups, such as construction of a building, contributions for relief of various kinds, etc., then a special allotment may be voted subject to approval by the managing body. The relief work of the German unions is very extensive compared with those of other countries. In 1927, 40,965,000 marks were expended for relief for the following purposes: Travel (mostly in behalf of the younger members), unemployment, sickness, old age, death, change of domicile, emergencies, and legal protection.

The 38 unions of the German Federation of Labor in 1927 expended the sum of 5,964,000 marks for their various publications. Union publications and the union press in Germany have attained considerable development. In the early days each union published only one weekly, which dealt closely with union questions and often was no more than a communication from the union management. To-day every union still has this "official communique" which members usually receive free of cost. However, the editorial character has changed. Contributions are not solely for the benefit of members, but also for their wives and children as well as for apprentices and young workers. Gradually these organs have become reading material for the union members and their whole families, so that they may spiritually participate in the life of unionism. In order to do justice to its manifold purposes, a number of unions in addition to official papers publish separate organs for women, for apprentices, and for the executive committees, as well as technical matter for the purpose of educating the members. The total editions for the 38 unions number 6,971,000, the 30 weekly editions alone number

4,471,000. The largest of the German union publications is the Metal Workers' Gazette (*Metallarbeiter-Zeitung*), 900,000 copies of which are published weekly.

The 38 trade or industrial unions constitute only one, although the most important, part of the organization known as the German Federation of Labor, the other being the local committees or labor councils (*Ortsausschüsse*), numbering 1,285 in 1927. These labor councils are organized by the representatives of the unions in the respective localities. Their duties are the representation of the common interests of members of a particular locality. These duties are of many kinds in Germany, a country with such varied social-political institutions. The labor councils deal with the elections of the labor tribunal, arbitration court, sick benefit fund, etc.; form special bodies for the protection of building-trades workers, for education, and for managing councils and for juvenile organizations; and manage libraries, labor temples, and restaurants and hotels for traveling members. The work of these labor councils is in most cases performed gratuitously by union members. Only 122 of the 1,285 labor councils have paid officials, the total number of these officials being 260. These labor councils have secretariats which give advice and help on social, political, and kindred questions to members and other persons. These secretariats have stood by in all emergencies when workers were in need of counsel and assistance. Their usefulness is publicly recognized and further attested to by contributions from public corporations of the State, Provinces, and municipalities amounting to 111,000 marks in 1927. This sum is, however, only a small part of the cost of these offices and labor councils the total cost of which amounted in 1927 to 3,134,000 marks and practically all of which was met by contributions from local members of from 0.40 to 1.80 marks per annum.

Activities of the German Federation of Labor

IN GERMANY the unions identify themselves with public developments more than in any other country. There is hardly a phase in economic and social life, in which the unions do not assist and cooperate to a high degree. Their representatives cooperate with economic organizations in the making of commercial treaties, the fixing of prices for coal, potash, etc., the employment service, the building of dwellings, protective legislation for tenants, the administration of the State sick benefit, accident and sickness insurance, and during the year that has elapsed since the enactment of the law for labor tribunals they have assisted in the appointment of judges. The labor tribunals now handle all disputes between workers and employers, disputes concerning tariff agreements, wage contracts, questions on industrial management, and similar problems.

These disputes, which formerly were settled by various courts and often by judges uninformed on the subject matter, are now placed under jurisdiction of the new labor tribunals, for which a special organization of tribunals has been created. This new organization numbers 527 labor tribunals, 79 agricultural labor tribunals, and, as a court of last resort, the "Reichsarbeitsgericht." The chairmen of these bodies are jurists selected by the Government. The assistants

are, however, selected by the unions and by employers' organizations. There is therefore in Germany an entirely new mode of administration of justice which, as far as we are aware, prevails in no other country.

In order to fulfill successfully so many varied and growing duties a steadily increasing body of well-schooled members becomes essential and this body must continually be trained for new duties. Each of the unions has, of course, for a long time maintained schools and courses where the members are instructed. This, however, is done more for the purpose of meeting special needs of the organization and pertains especially to the education of the younger members and apprentices. Necessary and important as are these schools of the single unions, they are insufficient to meet the general needs of the trade-union movement. To meet this deficiency, the management of the German Federation of Labor has established courses of instruction and lectures, thereby stimulating enrollments in schools on economics and in high schools. They have also instituted a central school for union youths and have established conferences of juvenile leaders where the organization of the young and the apprentices and their training is discussed.

Varied and successful as have been the opportunities for education in unionism, they are inadequate and lack a regular plan and fixed purpose. This deficiency is to be met by the foundation of a "Union High School," by the federation. The corner stone for this school, to be erected in Bernau, near Berlin, was laid several months ago. Several other such schools are to follow. The principal instruction is to be on national economics, labor laws, social politics, and unionism. The period of instruction is to last several months. Pupils live at the school and are selected by their respective trade-unions who defray the cost of instruction and loss of wage. For the purpose of furthering the educational program, the federation has established a special secretaryship, employing an expert.

The endeavor to increase success by careful planning and unification is not limited to the educational activities of the German Federation of Labor. As before mentioned, the number of unions has been reduced from 62 to 38 and this number will be still further reduced. However, in spite of the decrease in the number of unions, an old defect has remained—the lack of uniformity in relief benefits. As an example, of the 38 unions, 27 have an unemployment fund, the others have not. The relief fund of one union pays benefits for 27 days, while that of another pays for 280 days. One union pays a ridiculously low daily benefit, another pays 4 marks per day. The same lack of uniformity prevails with respect to dues, entrance fees, strike relief, etc. This lack of uniformity causes many unnecessary expenditures, and burdens the organization. To correct this evil, an administrative reform has been undertaken by the federation which has already brought some good results. It may be confidently expected that in a few years the greatest defects will be corrected. The first measure was the issuance of a uniform membership book.

The federation is the founder and promoter of several economic enterprises, such as cooperative housing (3,000 buildings were constructed in 1927 at reasonable cost for workers and employees), banks for the investment of the money of the unions and their members, and finally national insurance (*Volksfürsorge*) whereby workers

may insure against death, etc. The federation also owns a bicycle factory and manufactures bicycles, which are greatly in demand in Germany. These are sold on the installment plan to workers. Orders may be placed at any union office.

The death benefit and insurance for members of the union and their families is the cheapest in Germany because of the reduced overhead expense. This insurance organization also makes loans for the construction of dwellings for workers, and for union headquarters buildings and for their printing establishments.

The federation, whose headquarters are in Berlin, has its own publisher who prints and distributes the union's periodicals. This concern from January, 1927, to March, 1928, published 18 books with numerous editions. For the purpose of continuous instruction and information, the federation publishes five journals, the *Union-Gazette* (*Gewerkschaftszeitung*) published weekly in an edition of 76,000 copies, a woman's weekly journal of 70,000 copies, the *Juvenile Leader* (*Jugend Führer*) and a periodical on labor laws. Besides these publications there appears monthly a scientific publication (*Die Arbeit*) with 5,000 copies.

The officers and staff of the German Federation of Labor include 7 presidents and secretaries selected by the trade-union congress, 21 employees, 11 assistants, and 12 district secretaries distributed over the whole of Germany.

Congress of the German Federation of Labor

THE 1928 congress, which took place in Hamburg during the first week of September, was more successful than the preceding one, held in Breslau. During the three years intervening economic conditions have greatly improved. The representatives of the communists declined from 282 to 3. The number of union members has increased greatly. That the union movement has gained more prestige than ever is apparent from the fact that three active ministers of Germany, with a staff of officials, addressed the gathering in order to express the Government's attitude on various questions. Two of these ministers were formerly locksmiths and they are still members of their respective unions. Another feature characteristically German presented itself. Twenty thousand young members, apprentices and girls, came to Hamburg from all over the land to show their loyalty to the congress.

As is customary in a German workers' congress, first the activities of the organization management were criticized and all motions relative thereto carried. After this the congress concerned itself with its most important question, that of "industrial democracy" (*Wirtschaftsdemokratie*). This subject had been treated three years before in Breslau, but not in a satisfactory manner. This year the question was raised as to whether the term "industrial democracy" expressed the sum total of endeavors of the union movement—i. e., a transient, passing condition—or whether it designated rather a future status, a new order of society; if the first, then the term was erroneous. The congress decided to change the term to "the democratizing of industry" (*Demokratisierung der Wirtschaft*), because the latter more clearly expresses the endeavor of the trade-union movement. During the

long discussion it was brought out that while the original and primary duty of the union was the betterment of wage and labor conditions, at the same time it must seek an ever-growing part in the management of industry, and this participation must be used for the furtherance of the new economic order. In the democratizing of industry great structural changes now taking place become useful. An increasing number of independent concerns vanish and their organizations go to large concerns or are swallowed up by the trusts; the State and municipal governments are taking over more and more organizations and public utilities, and, finally, union organizations for the purpose of production and distribution are increasing rapidly. These and other changes offer unions ever-increasing possibilities of participation in industry and of making their influence felt with a view to obtaining for labor a greater share in management. There remains only the discovery of ways and means to accomplish this purpose.

As a result of these discussions a long resolution was adopted covering the ways and means by which the federation may accomplish its purpose. These include "the development of protective labor laws, the consolidation of social insurance and its administration by the workers; the extension of the right to vote by workers in factories; equality of rights and representation of the workers in all economic-political bodies; control of monopolies and cartels under the full participation of the unions; * * * the development of public industrial organizations, the promotion and advancement of production in industry through cooperative methods and expert training, and the development of union-owned industries; the promotion of cooperative buying and the breaking down of the monopoly in education by the privileged class."

The next important subject at the congress was the unification and self-administration of the social-political institutions. In Germany all wage earners are by law insured against sickness, accidents, invalidity, and unemployment. The measures collectively termed "social insurance" appeared one after another and their original law has in the course of time been changed and amended by numerous statutes and regulations. Because of this, such a maze of laws, statutes, regulations, etc., has been created that even the experts themselves can no longer find their way. Besides, the management of the social insurance has become unwieldy and expensive. Finally, the governmental bodies and insurance bodies exercise too great an influence in the insurance administration, and this policy is keenly felt by the workers.

After thorough investigation of these defects the congress in its resolution asked for the unification and simplification of the social insurance, the freeing of workers from the guardianship of the bureaucracy, and insurance bodies, and, above all, the administration of the social-political institutions by the insured themselves.

UNEMPLOYMENT CONDITIONS AND RELIEF

Character and Value of Employment Statistics

Summary

NEITHER in the United States nor in any other country are statistics currently compiled of a sufficiently comprehensive character to show the exact number of persons unemployed. To obtain this information at all accurately requires a canvass or census of the population, and such an undertaking is so difficult and costly that it is rarely attempted in any country and never has it been attempted at frequent intervals. Recent surveys of this general character have been made in Sweden and Japan.

In the absence of complete census surveys other sources have to be relied on for information regarding the number of persons out of work. The best of these other sources is undoubtedly the records developed under national unemployment insurance systems such as exist in Great Britain and Germany. To the extent that such systems are comprehensive in their coverage, the number of persons in receipt of unemployment insurance benefits measures with fair accuracy the number of idle workers. As a matter of fact, however, none of the systems existing is completely comprehensive, i. e., none of them covers all groups of workers and none of them pays benefits indefinitely. Moreover, no such insurance system is in operation in any part of the United States.

The other most valuable sources of unemployment information, and the only ones existing on any considerable scale in the United States are (1) reports of public employment offices, (2) reports of employers regarding the number of employees on their pay rolls, and (3) trade-union statistics showing the percentage of unemployed members.

(1) *Public employment offices.*—The reports from employment exchanges have a limited value. They show, usually for a weekly or monthly period, the number of persons applying for work, the number of demands for help, and the number of applicants for whom jobs were obtained. The principal weaknesses of these reports as a measure of the general employment situation, in the United States at least, are first, that many unemployed workers, particularly the skilled workers, do not use the exchanges, and, second, that in most States the exchanges are not sufficiently numerous to serve the whole population.

(2) *Employers' reports.*—Employers' reports regarding the number of employees on their pay rolls, usually made monthly, constitute an excellent index of the volume and trend of employment in the industries covered. Unless, however, the system covers (a very difficult thing to do) all industries and employments, including personal services, agriculture and casual jobs, such figures do not give a com-

plete picture of the trend of employment, as a decrease of employment in, say, manufacturing, may be balanced by an increase in the number of those employed in other industries not covered by reports. Moreover, at best, such reports show only the trend of employment and do not show at all the number of persons out of work.

For the United States the source most relied upon for information regarding employment conditions has been of this last-mentioned group, namely, employers' reports regarding the number of persons on their pay rolls. These figures have been compiled and published monthly by the Bureau of Labor Statistics. For many years only manufacturing industries were covered by these reports, but recently, the scope of the reports has been extended to other industries and still further extension is contemplated.

(3) *Trade-union statistics.*—Trade-union data, showing the number and percentage of unemployed members at regular intervals, are compiled in many countries. In the United States such statistics have been published for the building trades in Massachusetts for more than a year, and beginning in the fall of 1927 the American Federation of Labor has been compiling such data monthly for its membership. The weakness of these trade-union statistics as a measure of the general employment situation is the fact that the exact extent of organization in a trade is seldom known and the fact that the reporting union officials may not always be able to render accurate reports regarding the number of members out of work.

Details regarding the scope and character of employment statistics in the United States and various foreign countries are given below:

Statistics for the United States

Unemployment Surveys

ENUMERATION of the unemployed by canvass.—No nation-wide enumeration of the unemployed has been undertaken recently in this country. At three of the United States censuses of population (1880, 1890, 1900) efforts were made to carry out such an enumeration as part of the regular canvass, but these experiments have not been repeated in recent years, partly because of the expense involved and partly because of lack of confidence in the results on the part even of those who planned and organized the investigation. Local enumerations of this character have been made occasionally, as, for instance those made by the United States Bureau of Labor Statistics in 1915 (Bul. No. 172), by the department of economics of Ohio State University for the years 1921 to 1925 (Bul. No. 409) and by the Metropolitan Life Insurance Co. In the studies made by the Metropolitan Life Insurance Co. the families of industrial policyholders of the company were canvassed, first in New York and later in certain other cities, on the assumption (which appears to have been correct) that they constituted representative portions of the wage-earning population in the cities studied. In the two studies made by the United States Bureau of Labor Statistics in New York City in 1915 a complete canvass was made of the population of representative city blocks. The police department of New York City cooperated in the first of these by making a count of the unemployed among the homeless who were found in various temporary

lodgings on one night in January, 1915. In the more recent Columbus study a complete canvass was made of carefully selected sections of the city.

Registration of the unemployed.—Another method of obtaining data on unemployment has been the voluntary registration of unemployed persons. Such registration has been attempted in several cities, but nowhere has experience proved the method one to be recommended. Without a compelling motive for persons out of work to register, and without adequate means of preventing fraudulent registration if the incentive is expectation of relief, data so obtained are certain to be grossly inaccurate.

The unemployment statistics of Great Britain, although derived from actual registration of the unemployed, are of quite different quality. They are obtained through the administration of the law that provides compulsory unemployment insurance in most of the divisions of industry. In that case the insurance benefit provides the incentive for registration; and the labor exchange machinery, established to prevent the fraudulent receipt of benefits, largely excludes from the count persons who are not actually unemployed. In the United States, of course, no such data are available, because employment exchanges lack the kind of machinery for registration upon which such figures depend.

Estimates of numbers of unemployed.—Serious attempts to determine the number of unemployed persons have sometimes been made by responsible authorities from estimates collected at large from social workers, clergymen, poor-relief administrators, employers, labor leaders, and others. As an example, the two special inquiries made by the United States Employment Service in 1921 through its correspondents in numerous cities of the United States may be cited.

Data gathered in this way have a certain significance and value, particularly when no other method is possible, but the results must necessarily be of only limited accuracy.

The Employment Service of the United States Department of Labor publishes each month, in addition to the monthly report of activities of State and municipal employment services, an industrial employment information bulletin in which industrial conditions in different localities are summed up so as to give a picture of the employment situation throughout the entire country. For the purposes of this report the country is divided into nine districts with a director in charge of each zone. These directors establish contacts within their districts with chambers of commerce, labor union officials, employment offices, industrial leaders, business men and other sources of information and transmit their report each month to the United States Employment Service. In the bulletin the industrial conditions in the principal industrial centers and the principal industries are reported upon by each director for his particular district and there is a general summary showing the industrial employment situation in the country as a whole.

• *Trade-union statistics.*—Unemployment statistics obtained from trade-union sources are monthly or sometimes quarterly figures, commonly reported by the secretaries of various local unions, and usually expressed in the form of "percentage of members unemployed." In this country New York and Massachusetts are the only

States which have had extended experience with trade-union reports of unemployment. In both New York and Massachusetts their collection was discontinued soon after the current collection of employment statistics from representative manufacturing establishments was begun. In Massachusetts, the monthly publication of such statistics was resumed in 1927 by the State department of labor for the building trades, but not for other organized trades. These monthly statistics are very complete, and, in presentation, are analyzed by trades, cities, and causes of unemployment.

During the fall of 1927 the American Federation of Labor undertook the collection of data regarding unemployment covering the membership of the constituent unions. The results are published in the form of "percentage of membership unemployed." The data are given separately for the larger cities and also separately for building trades and other trades. The basic figures regarding total membership reporting are not published.

For industries and for communities where labor is strongly organized, trade-union statistics regarding unemployment are representative. A weakness is, of course, that many trades—particularly unskilled laborers and clerical workers—are not well organized. Another weakness is the difficulty of getting prompt and accurate reports from the various local unions. In the past this latter difficulty has been a serious one and has caused the results in many cases to be of dubious value.

Statistics of Employment Offices

WHILE the statistical methods followed in the compilation of employment office statistics in the different States and localities are not uniform and are, therefore, not always strictly comparable, practically all public employment offices in the States are now cooperating with the United States Employment Service which assembles and publishes monthly statistics of their operations. There are numerous other agencies concerned in the placement of workers, such as large employing corporations which have their own employment bureaus, the local branches of the trade-unions, bureaus which deal only with professional workers, and private employment agencies dealing with all kinds of labor, the number and variety of these agencies making it practically impossible to secure returns from any large proportion of them at any given time.

In addition to the practical difficulties in coordinating the reports from such a wide variety of agencies the incompleteness of the returns must also be taken into consideration. The number of persons who are out of work and who are seeking employment varies from day to day and such persons can be located only when they apply to some agency for assistance in securing work. It is probable, however, that a large proportion of the people who really desire work if they can get just what they want never apply to any employment agency and, on the other hand, many persons who register at an employment agency are not unemployed but are simply trying to get another or a better job; there is also the question of duplication, since many persons when seeking a job register at several agencies. It is evident, therefore, that the chief value of the returns from these bureaus as

an index of unemployment lies in the trend shown by their figures, giving, as they do, a fairly trustworthy basis for an estimate of the extent of unemployment and adding to the value of the figures when they are correlated with the statistics of employment secured from the pay rolls of a large number of industries.

The Federal Employment Service publishes a monthly report of the activities of State and municipal employment services which cooperate with it. There are 41 States and the District of Columbia which report on the number of requests for help wanted, and the number of persons registered, referred, and placed in employment in one or more principal cities of the State each month. The registrants in these offices are largely unskilled or semiskilled workers. The probable inadequacy of these figures as a source of unemployment data is shown by the fact that the total number of persons registered during a recent month was 208,742 and that during that month there were 173,688 calls for help from employers, 169,517 workers were referred to positions, and 146,266 workers were placed in employment. In spite of the comparatively small number of workers covered, however, these figures do show to a certain extent the demand for labor and the supply of workers and thus reflect the activity of business and the intensity of changes in opportunities for employment.

Employment Statistics from Pay Rolls

EVERY pay roll contains at least some mark of identification of each employee of the concern, and the wages received by him within a specified pay period. It is a timely and accurate record, available in almost every industrial organization of appreciable size. The required figures of total number employed and total wages paid can be transcribed to a report form with very little effort and with comparatively small chance of clerical error. It is practicable, therefore, to obtain these data at frequent intervals and by means of inquiries sent through the mail.

In some instances the bureaus now collecting pay-roll statistics obtain only the number of persons employed. More frequently both the number of employees and the total amount of wages shown on the pay roll are recorded, and the statistics are thus commonly referred to as statistics of employment and earnings. The figures for total earnings are valuable as a check on those showing the number employed. They are valuable also for what they show directly concerning purchasing power, and when divided by the total number of persons at work they give average earnings per employee, a figure which is worth obtaining for rough indication of changes in the rate of wages.

Development of pay-roll employment statistics.—Although the current publication of employment figures from pay rolls is a development of the last 13 years only, statistics of this sort are not new. The United States Bureau of the Census has obtained statistics of the numbers employed monthly in manufacturing establishments for the years in which the national censuses of manufactures have been taken—every five years from 1899 to 1919, and subsequently every two years. In Massachusetts, in 1886, the office which was then known as the Bureau of Statistics of Labor inaugurated an annual census of manufactures,

in which similar monthly employment figures were collected. This State census of manufactures has been continued each year since, thus giving Massachusetts the longest record of employment fluctuation which is anywhere available. Monthly employment figures were also gathered in an annual census of manufactures in New Jersey from 1893 to 1918. In Ohio monthly figures for employment in manufacturing industries were assembled each year from 1892 to 1906, and since 1914 a comprehensive canvass of employment and wages by months has been made annually, covering agriculture, construction, service, trade, transportation, and public utilities, as well as manufacturing.¹ In all of these records, however, the monthly data for each year were compiled after the completion of the calendar year to which they referred, and were tabulated and made public only after an interval ranging from several months to a year or more.

The earliest current collection of such data in this country was made by the New York State Department of Labor. The reporting establishments were selected to represent the manufacturing industry as a whole. The first data were collected in June, 1915, but during the first year employers were requested to furnish figures for both the current month and the corresponding month in the preceding year; thus, in effect, the New York series of pay-roll statistics for manufacturing industries dates from June, 1914.

The United States Bureau of Labor Statistics began to collect pay-roll statistics shortly after the New York bureau, but confined itself to fewer industries. Beginning with October, 1915, reports were obtained from employers in four industries—boots and shoes, cotton, cotton finishing, and hosiery and underwear. The list was extended, however, so that by the end of 1916, 13 manufacturing industries had been included. Several of these series were carried back to December, 1914. In July, 1922, the scope of the inquiry was enlarged to include 42 manufacturing industries, and additional industries have been added since, so that the latest published report (October, 1928) covers 54 leading manufacturing industries. In July, 1928, the Bureau of Labor Statistics further began to enlarge the scope of its employment survey to include other important fields of industry. The August, 1928, report included the trend of employment and earnings in wholesale and retail trade establishments. The September, 1928, report began the current publication of employment data for public utilities; the October report included for the first time figures relative to anthracite and bituminous coal mining; the November, 1928, report added data on hotel employment and metal-liferous mining. All these industries will be carried currently hereafter. The number of reporting establishments, especially in these fields in which the Bureau has recently started its survey, will be constantly increased until a proper proportion of their employees has been secured.

Number and activities of existing agencies.—The accompanying table gives a list of the Federal and State agencies in the United States which publish current monthly pay-roll statistics, and indicates the general scope and character of the information collected. It

¹ While these later data have been collected and tabulated annually, they have been published only for the years 1914, 1915, and 1923. The U. S. Women's Bureau, however, is now making a study of employment fluctuations as it has affected woman workers in Ohio industries, and this report will contain full series of Ohio data since 1914 for the more important industries.

shows that pay-roll statistics are now being collected from month to month in the United States by 2 Federal bureaus and by 10 State bureaus.

In addition, employment statistics are being collected by some of the Federal reserve banks and privately by a number of employers' associations.

The United States Bureau of Labor Statistics covers the widest field. In October, 1928, its current figures covered 17,220 establishments in the following industrial groups: Manufacturing industries (54), wholesale trade, retail trade, public utilities, anthracite mining, and bituminous coal mining. These establishments in October had 3,890,778 employees whose combined earnings in one week were \$108,180,961.

The reports received from 11,940 establishments in the 54 manufacturing industries in October, 1928, covered 3,287,165 employees whose combined earnings in one week were \$90,868,879. These employees represent one-half of the employees in these manufacturing industries and nearly 40 per cent of the employees in all manufacturing industries in the United States. In collecting these figures the Bureau of Labor Statistics cooperates with the State labor departments in seven States, thus avoiding duplication of work.

The Federal bureau's figures are now published in a special section of the Labor Review, which is also issued as an advance pamphlet, news releases being sent out earlier as data are available. The data for the 54 manufacturing industries are given for the main industries and their subdivisions, and a recapitulation by the nine geographical divisions used by the United States Census Bureau is also given. The data for the nonmanufacturing industries and public utilities are published by geographic divisions only. It has not yet proved feasible for the Federal bureau to publish the data for each State, or for Federal reserve districts, which, it has been suggested, would make the data directly useful to the 12 Federal reserve banks. All the cooperating State bureaus, however, now publish their own data currently for local use.

Summary figures for the railroads, furnished by the Interstate Commerce Commission, are included in the monthly report issued by the Bureau of Labor Statistics, but they are for earlier dates than the manufacturing statistics. The Department of Agriculture has continued experiments begun by the Wisconsin Industrial Commission on the difficult problem of collecting employment figures for farms, but the statistics are not yet currently available. Data on employment in wholesale and retail trade are being obtained by certain State bureaus, including Wisconsin and Illinois, and by the Federal Reserve Bank of Philadelphia, as well as the United States Bureau of Labor Statistics.

Despite encouraging progress, the great majority of States have no information regarding employment within their own boundaries, although manufacturing plants therein may contribute to the data collected by the United States Bureau of Labor Statistics for the country as a whole.

FEDERAL AND STATE AGENCIES WHICH PUBLISH CURRENT MONTHLY PAY-ROLL
STATISTICS OF EMPLOYMENT

| Agency | Industries covered |
|--|---|
| Federal bureaus: | |
| U. S. Bureau of Labor Statistics..... | Manufacturing, mining, public utilities, trade, and hotels. |
| Interstate Commerce Commission..... | Railroads. |
| State bureaus: | |
| California. Department of Industrial Relations.... | Manufacturing; water, light, and power. |
| Illinois. Department of Labor..... | Manufacturing; coal mining; public utilities, including street railways; construction; trade; hotels. |
| Iowa. Bureau of Labor..... | Manufacturing, trade. |
| Maryland. Commissioner of Labor and Statistics.... | Manufacturing, trade, public utilities. |
| Massachusetts. Department of Labor..... | Manufacturing. |
| New York. Department of Labor..... | Manufacturing; water, light, and power. |
| Oklahoma. Department of Labor..... | Manufacturing, mining, oil, public utilities. |
| Pennsylvania. Department of Labor and Industry.... | Manufacturing, construction. |
| Wisconsin. Industrial Commission..... | Manufacturing, mining, quarrying, transportation, hotels and restaurants, construction, trade, logging, agriculture, certain professional services. |
| New Jersey. Department of Labor..... | Manufacturing. |

Statistics for Foreign Countries

EXAMINATION of European publications shows that 19 countries publish current unemployment statistics in some form. This section of the present article summarizes the unemployment statistics of these 19 European countries and of Canada.

Unemployment insurance reports.—Many of the statistical reports on unemployment published abroad are collected by groups organized primarily to administer financial assistance to the unemployed or to aid them in securing work. By carrying unemployment insurance, which may be maintained by contributions of either wage earners alone, or with the financial help of Government, or employer, or both, workers obtain weekly allowances when unemployed, in lieu of wages. These insurance systems provide financially for a large percentage of unemployed persons in certain countries and on the basis of the number of applications for and payments of benefit a statistical record is developed. Sixteen of the twenty countries here considered have unemployment insurance systems; 6 nations have compulsory systems that are State administered; 10 have union-administered plans that are either subsidized and supervised by the State or administered entirely under local union rulings. Sweden expends considerable sums annually for unemployment relief but maintains no insurance system.

Existing insurance systems provide primarily for industrial workers, both manual and nonmanual, and persons employed in transportation and mining who earn less than a stated sum. Exclusion of agricultural and forestry workers, domestic servants, and casual laborers from participation is general. Only a limited number of countries allow benefit to agricultural workers and domestic servants; the British law covers the casual laborer. To enjoy benefits the wage earner insured under a national law must have attained a minimum age. This minimum is lowest in Italy (15 years). In certain European countries social legislation provides pensions for aged workers, the pensionable age varying between ages 60 and 65

according to the law of the country. When an unemployed beneficiary under the insurance system becomes eligible for a pension he ceases to draw insurance benefit and is no longer counted as unemployed.

Statistics based on insurance returns, reported by the majority of countries, show total number of persons registered as unemployed on insurance books. It is understood that this live register of unemployed includes persons serving waiting time before they become eligible for benefit payment but excludes those persons who have been dropped from registers for any reason. Belgium and Switzerland tabulate totally and partially unemployed persons separately; Great Britain reports temporary and complete stoppages. A second group of countries (Czechoslovakia, Finland, Germany, and Hungary) publishes totals showing only those persons in receipt of benefit. German figures are grouped by type of benefit and period of unemployment of recipients. Czechoslovakia publishes a monthly index of total unemployment reported under the insurance system, January, 1921, being used as the base, or 100, while Hungary shows a percentage of unemployment based on the relationship of total unemployed recorded under the insurance system to the total membership of the unions providing insurance.

In most instances figures are published monthly. Recapitulations and additional data are prepared quarterly, semiannually, or annually. Totals shown represent either volume of unemployment on a given date, or an average for a specified period.

Public employment exchange records.—With few exceptions State statistical offices show records of unemployment based on returns furnished by public employment exchanges. Registration of persons seeking work through such exchanges is voluntary except in Italy where it was made compulsory in March, 1928. Voluntary registration in employment exchanges is augmented, in countries where unemployment insurance is compulsory, by automatic registration with exchanges of all applicants for benefit under the insurance law. This double registration is facilitated where insurance branches are housed in labor exchanges. In countries where insurance is privately administered and voluntary not all insured unemployed are necessarily included in labor exchange records. In many countries the free labor exchange, open to all classes of labor, competes with privately run exchanges, for which no records are available.

Basic tables covering employment exchange returns show applications for work and help and number of unsatisfied applications at the end of a given period. This method is general. In addition detailed tables show number of applicants, (1) by geographical areas and (2) by industries, classified according to sex, occupation, or even by degrees of skill. Reports are usually published weekly or monthly.

Figures showing average number of vacancies per 100 applications or number of applications per 100 vacancies are not unusual. The ratio of applications to vacancies over long periods of time reflects business conditions. In times of business expansion the number of applications per 100 vacancies decreases sharply. In depression the increase in applications per 100 vacancies is likewise marked.

Trade-union statistics.—Many unions report unemployment on the basis of insurance records. In Canada and Sweden, where there are

no general insurance systems in force, trade-union statistics are collected irrespective of whether or not members are insured. These records cover large percentages of union membership and are important sources of unemployment statistics in these two countries. Canadian unions exclude from reports on unemployment in unions persons who are employed on work outside their trade and persons not working owing to illness.

Employers' reports.—Monthly employers' reports, showing number of persons on the pay roll (volume of employment), indicate trend of unemployment. But it may not be assumed that all persons dropped from pay rolls are out of work, as the figures cover only certain trades and workers may have found work in other trades. Seven countries show volume of employment covering from 200,000 to 1,500,000 employees in selected industries.

Other specialized statistics that have a bearing on unemployment are those on employment of agricultural workers and seamen in Sweden and in relief work in several other countries.

Digest of Unemployment Statistics

The following summary statements are based on published reports of the various countries. The figures cited are merely illustrative. The latest data for unemployment in Europe are given in an article beginning on page 72.

Austria

Insurance.—Insured persons are entitled to 30 weeks' normal benefit and emergency relief up to the limit of the fund. Number of persons receiving benefit classified by industries is shown monthly for the country as a whole and for Vienna. This number in September, 1928, totaled 112,595. Unemployed persons are excluded from benefit at 60 when they are placed on old-age pensions.

Employment exchanges.—Statistics cover all registrants, including agricultural and intellectual workers. Net change in registration is shown by months classified by industries for the country as a whole and for Vienna. The registration in September, 1928, was 136,984 (includes insured unemployed).

Belgium

Insurance.—Unions, with 600,000 members, pay benefit after one year's membership. Figures show by industries the number of wholly and partially unemployed and the percentage they form of the total insured, as well as the number of days lost and days for which benefit is paid. Reports are as of the last working-day of each month. In June, 1928, the totally unemployed numbered 3,709; and those partially unemployed 19,115.

Employment exchanges.—These are run in cooperation with the insurance offices. Figures show net change in registration during each month by sex and by principal industries, geographical areas, and special occupations. Applications for employment unsatisfied at end of July, 1928, numbered 3,009.

National crisis fund.—Number of persons in receipt of benefit are shown by months classified by geographical areas; in May, 1928, these numbered 17,246.

Canada

Employment exchanges.—Monthly figures show net change in registration by Provinces and cities. At the end of July, 1928, there were 6,802 men and 2,737 women registered for employment.

Employers' reports.—Persons in all industries except agriculture, fishing, hunting, and highly specialized business in shops employing 15 workers or more are covered. In July, 1928, these covered 1,003,085 persons. An index is shown monthly of the number of persons on the pay rolls of establishments reporting, for the country as a whole and for economic areas and industries.

Trade-union reports.—Each month unions having about 180,000 members report the number of their members out of work through economic causes, by cities and trades. If a member secures work in another trade during a slack period in his own trade or if he is ill he is not counted as unemployed. Printed figures show the percentage of unemployment in trade-unions by Provinces and by groups of industries.

Czechoslovakia

Insurance.—Insurance covers some 1,669,456 ² trade-union members. The unions report members in receipt of benefit; they also calculate an index of total unemployment based on January, 1921, as 100. The reports show the percentage relationship of total unemployed and of industrial workers only to the working population. In February, 1928, there were 20,360 persons in receipt of benefit.

Employment exchanges.—Employment office reports show the net change in registration for each month; also number of vacancies per 100 applications and applications per 100 vacancies by 25 industries and by Provinces.

Denmark

Insurance.—Reports show the number of unemployed union members at end of each month by geographical and trade divisions, for a total trade-union membership of 275,000. Persons participating in strikes or lockouts who are sick, incapacitated for work in military service, or on part-time employment are omitted.

Employment exchanges.—Registration includes persons reported by insurance officials. Monthly figures show net change in registration by six trade groups.

Estonia

Insurance.—Certain unions administer their own insurance systems. The number of persons who receive benefit is not known.

Employment exchanges.—The number on the live register is shown at end of each month.

Finland

Insurance.—Unions (with a total of 20,000 members) grant insurance for 50 days after a 5-day waiting period. Their annual figures show membership at beginning and end of year; number receiving

² December, 1924.

daily benefit and traveling benefit, by sex; number of days of unemployment registered and days for which benefit was received; and number of unemployed, classified by duration of benefit.

Employment exchanges.—Net change in registration is shown by months, with separate figures for applications from districts other than the one within which agency operates.

France

Insurance.—Unemployment insurance in France is carried on by voluntary organizations of unions and other mutual concerns. Persons are eligible to benefits after 6 months of membership in union. The reports give the number of unemployed on the active file at the end of each week by sex for the country as a whole and for Paris. On October 27, 1928, a total of 453 persons was reported on the active file.

Employment exchanges.—Each week permanent placements, special placements, and collective placements of dockers are reported, as is demand for work and help unsatisfied. Statistics are classified by geographical areas and sex. On October 27, 1928, the report showed 10,704 persons registered for work.

Germany

Insurance.—The State system of unemployment insurance covers 18,000,000 of a gainfully employed total of 32,000,000. Persons earning less than 3,600 marks are eligible to benefits, subject to a membership of 26 weeks and a waiting period up to 1 week. Normal benefit is paid for 26 weeks, but in emergency, crisis benefit may be extended to a maximum of 52 weeks. Numbers receiving benefit are classified by sex, length of time they have received benefit, industry, geographical area, and even by size of cities where beneficiaries live. Detailed tables show figures for a month beginning on the 16th and ending on the 15th of the following month. Summary tables show total number in receipt of benefit on the 1st and 15th of each month. On September 15, 1928, the total number in receipt of benefit was 576,498. Supplementary statistics are shown by certain unions. The membership of these unions on July 31, 1928, was 4,351,900, of whom 273,700 were totally unemployed and 283,600 had part-time work at that time.

Employment exchanges.—One thousand public exchanges report net change in registration. Certain reports show registrations between the 16th of one month and the 15th of the succeeding month, classified by sex, industry, and geographical area. Summary reports for the month of August, 1928, show that 1,162,000 persons were registered for employment.

Employers' reports.—Employers' figures cover 250,000 workers and show the number of workers in establishments reporting activity good, satisfactory, or bad. Figures are shown by months, with a forecast.

Sickness insurance.—Figures cover the same group as unemployment insurance.

Great Britain

Insurance.—Nearly 12,000,000 of a total of 17,000,000 wage earners and small-salaried persons, including casual workers, are covered

by unemployment insurance. There is no specific limit to the benefit period. Figures based on insurance experience show the estimated number of insured and the number and per cent unemployed by months. Persons between 16 and 65 are included. Persons excluded are those who do not keep in touch with exchanges after a two months' lapse, and those engaged in trade disputes (unless they register for other employment). Classification is made on the basis of industry and sex. Wholly unemployed persons and those affected by temporary stoppages are shown separately. Statistics cover Great Britain and Northern Ireland and Great Britain separately. On August 20, 1928, the estimated number of insured was 11,784,000; the total number wholly unemployed was 979,926; and those unemployed because of temporary stoppages numbered 395,293.

Employment exchanges.—Weekly reports show registration with public exchanges of persons both insured and uninsured; monthly summaries show the number wholly unemployed, unemployed because of temporary stoppage, and unemployed who are normally in casual employment, separately for men, women, boys, and girls. The total number registered in Great Britain and Northern Ireland on August 27, 1928, was 1,367,376.

Hungary

Insurance.—Socialist and Christian labor unions (with 215,000 members) report monthly the number of unemployed members in receipt of benefit and the percentage the unemployed form of the total membership. The unemployed are classified by occupations and Provinces.

Italy

Insurance.—The compulsory unemployment insurance system provides for a waiting period of one week. The period of benefit is 90 days (24 fortnightly payments) or 120 days (36 payments). The monthly reports show number of unemployed registered, number who are receiving benefit and those partially unemployed, by sex, for 11 industries and 18 Provinces. Failure to register when unemployed excludes the worker from benefit. In March, 1928, the number totally unemployed was 411,785; those having only partial employment numbered 47,036.

Employment exchanges.—Registration has been compulsory since March, 1928. Results are unknown as yet.

Latvia

Employment exchanges.—Net change in registration is shown monthly. On March 31, 1928, there were 5,570 on the live register.

Relief works.—In March, 1928, 2,484 males and 1,219 females were employed on relief works.

Luxemburg

Employment statistics.—Total employment in the iron and steel industries is reported periodically.

Netherlands

Insurance.—Trade-unions (having a membership of 300,000 insured and 7,000 uninsured) report on number of persons covered by insurance, number and percentage unemployed during the week and month, number of days lost, and number receiving benefit. Unemployed reported for March, 1928, numbered 19,740.

Employment exchanges.—Reports show net change in registration during month.

Norway

Insurance.—Trade-unions having a combined membership of 32,000 report the per cent of unemployment within their ranks monthly by trades. The annual report shows the total union membership, number in unions reporting by months for the year past, and the relative percentage of unemployment for the trade-unions reporting.

Employment exchanges.—The detailed monthly report shows the relationship between applications, placements, and numbers unplaced, by occupation and industrial group. Agricultural and domestic workers are included in public exchange reports.

Poland

Insurance.—Under the compulsory insurance scheme benefit is paid for 13 weeks normally; and for 17 or 20 weeks in cases of need. Monthly figures show registered persons and those in receipt of benefit.

Employment exchanges.—Reports of the employment exchanges show the net change in registration during the month.

Employers' reports.—Reports from employers cover 370,000 workers in 5,000 establishments. Figures are published for each week, showing the number employed by 12 industries and 14 territorial groups.

Reports of Ministry of Labor.—The number unemployed March, 1928, is reported as 167,676.

Russia

Insurance.—The State unemployment insurance scheme provides for a waiting period of 3 months. The period of benefit is 18 months, each 9 of which must be preceded by a 3 months' waiting period. The number unemployed in January, 1927, is given as 1,500,000; persons receiving benefit numbered 400,000.

Employment statistics.—Figures cover 1,500,000 workers.

Sweden

Trade-union reports.—Statistics from labor unions cover 275,000 members of 30 national unions (the total union membership is placed at 529,000). Figures show total unemployed, by sex, on the last day of each month.

Employment exchanges.—Reports show the net change in registration and the number of working weeks lost during month.

Unemployment relief.—Monthly figures show for 19 industrial groups the number applying for relief, number receiving benefit, and number employed on public relief works.

Employers' reports.—Quarterly reports from employers cover 260,000 employees in 2,000 concerns. The number of workers in establishments where the employment situation is considered very good, good, medium, fair, and bad is shown for important industries.

Agricultural and forestry workers and seamen.—Report covers one-third of the wage earners in kingdom. Once a year figures are collected by questionnaire and show the number paid off during the year and the percentage the number engaged is of the retirements.

Census of employment in 1927.—For summary see Labor Review, November, 1928, page 165.

Switzerland

Insurance.—Unions with 248,588 members report quarterly the total unemployed and partially unemployed among their membership. In December, 1927, there were 11,306 wholly unemployed and 4,231 partially unemployed.

Employment exchanges.—Monthly figures, based on reports of public exchanges, show the net change in registration, by sex, classified by occupations for 20 industries, and by degrees of skill. The total registration on September 29, 1928, was 6,523.

Employers' reports.—These reports cover 200,000 wage earners in 1,300 establishments. They show the number employed each month and characterize conditions as good, satisfactory, bad.

Proposal for Three Billion Dollar Reserve Fund to Stabilize Employment

THE institution of a \$3,000,000,000 Federal and State reserve construction fund was proposed at the recent conference of governors at the request of President-elect Hoover, by Gov. Ralph O. Brewster, of Maine. The scheme, according to press reports, is part of Mr. Hoover's program for reducing unemployment in the United States, and is intended to do for industry and labor what the Federal reserve system has accomplished for finance.

The project calls for the cooperation of Federal and State and municipal governments in controlling construction work for the advantage of the public so that a reserve may be amassed in periods of prosperity to offset a future lean year. Under the plan, Federal, State, and municipal authorities would hold up construction work equivalent in cost to two years' ordinary expenditure on public improvement, and launch these postponed projects when there was real danger of a business depression. The funds accumulated through the postponement of construction would be, Governor Brewster declared, "one of the best forms of insurance against national panics."

With a yearly expenditure of \$7,000,000,000 upon construction, the United States, Governor Brewster stated, "is in a position to stabilize prosperity to a most remarkable extent." Public authorities spend over \$1,500,000,000 upon such work. This fact is of primary concern in this stabilization project. It is believed that private industry will promptly follow the lead of the Government in successful experiments in controlling the volume of construction. Moreover, it is

suggested that private business may also extend this control "to the renewal and extension of capital facilities of every sort."

Governor Brewster explained that "no infringement of legislative prerogatives was contemplated, because no project could be carried out except as the legislature might direct, although the rapidity of the construction program within defined limits could be accelerated or retarded to synchronize with national and local needs."

"No centralization of authority is proposed, but merely the creation of a condition by concerted action that shall make possible a remedy that will appeal persuasively to all. Follow the flow of those \$3,000,000,000 to the contractor, to the laborer, to the material men, to the factory, to the factory employees, to the merchants, to the farmer. It goes like the house that Jack built and unemployment is at an end."

Attention was called to the fact that Federal indexes are already being worked out which would make it possible to base the operation of the project on simple facts.

In an executive session on November 21, 1928, the conference considered Governor Brewster's proposal that it indorse the project. At the close of such session an official announcement was made that no action had been taken, as it was not the policy of the conference to indorse resolutions.

The Work of European Labor Exchanges¹

By PETER A. SPEEK

THE primary purpose of labor exchanges is to find jobs for idle workers and workers for idle jobs. In addition the existing labor exchanges in European countries serve as starting and directing points for various unemployment relief measures, such as redistribution, migration, and emigration of idle surplus labor, training of the unemployed, unemployment insurance, relief payments, relief works, and collection of statistical and other information needful in handling the unemployment problem on a national scale.

Private Labor Exchanges

AMONG private labor exchanges may be distinguished the following:

1. Individual or commercial labor exchanges operated for profit, charge a fee to the workers seeking jobs and often to the employers seeking workers. This type was prevalent in the past.
2. Employers' labor exchanges are usually operated either by individual large concerns, or by employers' associations for related industries for the benefit of their operators. They do not charge a fee to the workers applying for jobs.

¹Data are from Ministry of Labor Gazette, London, monthly issues from January, 1926, to date; Reichsarbeitsblatt, Berlin, January, 1925, to date; Seymour, John Barton: The British Employment Exchange, London, P. S. King & Son (Ltd.), 1928. Studies and material relating to labor exchanges in various countries, published by the International Labor Office, at Geneva, from January, 1922, to date, and an unpublished list of laws and the number of labor exchanges in various foreign countries were obtained from the Washington Branch of the International Labor Office.

3. Practically all labor unions have certain employment activities. Large unions often operate a well-organized labor exchange for the benefit of their members and would-be members. Usually they do not charge a fee. Aside from their primary purpose of filling vacant jobs, the labor union employment exchanges serve as a means for increasing the union membership and for guarding union agreements with employers.

4. Joint trade labor exchanges are operated on a cooperative basis between the employers and employees for their mutual benefit.

5. Almost all fraternal associations and charity organizations are engaged in employment activities for the benefit of those who are out of work. No fee is charged by these organizations.

Public Labor Exchanges

PUBLIC labor exchanges are a later development. The first to appear were those operated by local communities and municipalities, followed by those of provincial or State governments, and, finally, by those of the central or Federal Government, thus completing a national system of public labor exchanges. The services of the public labor exchanges are rendered free.

The fields of activity covered by labor exchanges fall into three groups: (a) General, serving all the industries and occupations in a given district; (b) specialized, as, for instance, those large-scale labor exchanges in a big industrial city or center which have divided their activities into separate departments on the basis of occupation prevalent in the district, sex, age, and skill; and (c) special public labor exchanges, which are the latest development. Among these, each exchange serves only a definite occupation or industry or a group of related industries.

The experience of practically all European countries shows that the private labor exchanges do not meet the problem. The individual or commercial exchanges charging a fee are apt to take advantage of the distressed conditions of the unemployed by charging unduly large fees, or by entering into collusion with dishonest small employers, usually in unskilled occupations, for the purpose of splitting the fees and applying a "chain" method, that is, men are taken on and soon discharged, new men are taken on and again soon discharged, etc. Then, too, these private exchanges are separate units and do not represent an organized employment field to any degree. Laws regulating their business do not help much, for usually ways can be found to evade the regulations.

The labor union and employers' labor exchanges are limited and cover only certain special occupations and industries. The charitable organizations deal mainly with odd-job men who are verging on the unemployable. The employment activities of fraternal associations are usually confined to their membership.

The inadequacy of the private labor exchanges, as above indicated, has led almost all European countries to establish public labor exchanges—community or municipal, provincial, and State. These are usually in a national system, which permits the coordination of the several units into one centralized system, according to the standards suggested at the first International Labor Conference at Washington in 1919 and expressed in article 2 of the draft convention in the following words:

Each member which ratifies this convention shall establish a system of free public employment agencies under the control of a central authority. Committees which shall include representatives of employers and of workers shall be appointed to advise on matters concerning the carrying on of these agencies.

Where both public and private free employment agencies exist, steps shall be taken to coordinate the operations of such agencies on a national scale.

The operations of the various national systems shall be coordinated by the International Labor Office in agreement with the countries concerned.

Twenty-three countries at the present moment have followed the above policy. These are:

| | | | |
|-----------|----------------|------------|---------------|
| Austria. | Germany. | Italy. | Jugoslavia. |
| Bulgaria. | Great Britain. | Japan. | South Africa. |
| Denmark. | Greece. | Luxemburg. | Spain. |
| Estonia. | Hungary. | Norway. | Sweden. |
| Finland. | India. | Poland. | Switzerland. |
| France. | Ireland. | Rumania. | |

These countries have also passed the necessary legislation in application of the convention, either before or after the adoption of the policy.² In addition, the Netherlands has adopted the policy and is considering the necessary legislation.

Great Britain was the first country to establish a national system of public labor exchanges directly controlled by the State, by the labor exchange act in 1909.

In Germany under a notification of the Federal council of June 14, 1916, the governments of various States were authorized to maintain joint labor exchanges.

In Belgium the labor exchange system is directly attached to the Ministry of Industry and Labor.

In Canada labor exchanges were established by provincial governments and by the Federal Government in those Provinces which lacked labor exchanges. The entire system is now coordinated into one system.

It thus appears that a centralized system of public labor exchanges is now operating in practically every foreign industrial country.

The following table shows the present distribution of public labor exchanges in 15 European countries:

DISTRIBUTION OF PUBLIC LABOR EXCHANGES IN 15 EUROPEAN COUNTRIES IN 1927

| Country | Number of public labor exchanges * | Population in thousands | Population (in thousands) per public labor exchange |
|---------------------------------|------------------------------------|-------------------------|---|
| Czechoslovakia..... | 437 | 13,613 | 31 |
| Denmark..... | 89 | 3,419 | 38 |
| Estonia..... | 9 | 1,114 | 124 |
| Finland..... | 24 | 3,526 | 143 |
| Germany..... | 1,293 | 62,349 | 48 |
| Great Britain..... | 1,162 | 42,768 | 37 |
| Hungary..... | 8 | 8,368 | 1,046 |
| Netherlands..... | 40 | 7,416 | 185 |
| Norway..... | 48 | 2,650 | 55 |
| Poland..... | 20 | 29,160 | 1,458 |
| Rumania..... | 37 | 17,393 | 470 |
| Serb-Croat-Slovene Kingdom..... | 7 | 12,017 | 1,716 |
| Soviet Russia..... | 281 | 146,305 | 521 |
| Sweden..... | 36 | 6,524 | 168 |
| Switzerland..... | 35 | 3,936 | 112 |

* For some countries those private labor exchanges which are attached to the system of public labor exchanges by certain public regulations are included.

² A list of the laws and decrees relating to public labor exchanges, enacted by various foreign countries, is given at the end of this article.

From this table it appears that Czechoslovakia, Great Britain, Denmark, Germany, and Norway have developed the most intensive systems of public labor exchanges in comparison with other European countries, whose systems are still in widely varied degrees of development. However, the table does not show the quantity or quality of the placement work done by labor exchanges in various countries, and therefore fails to indicate whether a system in one country is more or less efficient than in another.

Administrative Machinery

COOPERATION of employees and employers.—In general, the European labor exchange systems are built on the principle of cooperation, good will, and sympathy of employees, employers, and general public, on the principle of complete neutrality in the case of trade disputes, and on the absence of politics and bureaucratic methods and spirit in the activities of public labor exchanges.

The cooperation of the employees, employers, and general public is secured through labor and employers' associations, with the Government representing the public at large. Also, the employees and employers have a joint nonpartisan committee attached to every important office of the system, for advice, guidance, and quite often for judicial decisions.

To keep politics out of the system the appointments are usually made under the civil service rules. A rigid examination and a certain amount of experience are required from the candidates.

To keep bureaucratic methods and spirit out of the system a certain amount of autonomy is granted to it by the law. Yet, at the same time, to exercise public authority, control, and general direction over the policies of the system in order that the nation as a whole will be well served and expenditures properly made and justified, the system is subordinated and attached directly to the ministry concerned with labor and employment.

Central office.—The central office or headquarters of the system is usually presided over by an assistant minister (assistant secretary) of the corresponding ministry. This office exercises general control by supervising and directing the national system.

Regional offices.—Next come the divisional, State, provincial or regional offices, which have direct control, supervision, and direction of local labor exchange offices within their jurisdiction and serve as clearing houses for equitable distribution of available jobs and workers between various industries and areas of the country. These offices are usually in the charge of a divisional comptroller.

Labor exchanges.—Finally come the local labor exchanges with their main and branch offices, each in the charge of a manager or superintendent. In case of large offices there is also an assistant manager, besides numerous other staff members, such as registration clerks, bookkeepers, investigators, interviewers, statisticians, and others.

Specialization.—Large exchanges usually maintain departmental divisions, with separate departments for women and men, for juveniles and apprentices, for skilled and unskilled, and, as a later development, for principal occupations and industries, such as agriculture, domestic service, seamen, mechanics, carpenters, and others. Experience has

shown that such departmental divisions greatly facilitate the work of labor exchanges and that a system consisting entirely of special labor exchanges—that is, exchanges devoted only to a definite occupation or industry or group of industries—is still more efficient than a system of mixed labor exchanges—that is, exchanges doing employment business for a number of occupations, industries, and groups of unrelated industries at the same time. This tendency toward development of special labor exchanges is noticeable in Great Britain, Germany, the Scandinavian, and other industrial countries during late years. The principal cause of such a tendency lies in the fact that the officials and workers of a special labor exchange have a better opportunity to acquire a broad knowledge of a single occupation and a wide experience in dealing with it than when they deal with many occupations and industries; for each occupation requires different approaches and methods in handling. Then, too, workers of various occupations and callings, for instance, teachers, theatrical artists, engineers, day laborers, nurses, domestic servants, odd-job workers, etc., do not mix well with one another and even do not want to be in the same waiting crowd on the premises of the labor exchange.

Joint committees.—To each labor exchange, as already mentioned, is attached a joint committee consisting of equal representatives of employees and employers under a chairman appointed by the Government or by the members of the committee, while the manager of the exchange serves as the secretary to the committee.

The purpose of such a committee is to assist, advise, and direct the activities of the exchange and to secure the confidence of the employees and employers, the users of the services of the exchange. It is, therefore, necessary that the committee members be thoroughly representative of the parties concerned.

Usually the members are appointed in consultation with the local employers' and workers' organizations (as in Belgium and Great Britain) or from the list of candidates submitted by both groups of organizations (as in Denmark, Finland, and Norway). In case there is a disagreement among various organizations of either party or several organizations want to be represented, then a proportional representation is secured (as in Denmark). In Rumania the representation of unorganized workers and employers is also provided for.

In Great Britain all cases of disputes connected with the activities of the exchange are referred to a sort of court or board of referees, attached to the exchange or a group of exchanges, and consisting of one representative of employees and one of employers, under a chairman appointed by the Government. If a party is not satisfied with the decision of this court or board, he may appeal his case to the umpire appointed by the Central Government, whose decision is final. Practically the same procedure is followed in a number of other countries in cases of disputes connected with labor exchange activities.

Placing Methods

THE principal work of labor exchanges consists in bringing together the employers wanting workers and the workers wanting jobs and in assisting to fit the worker to the job and the job to the worker by a careful selection. This work is known, for instance, in Great Britain, under the laconic term of "placing" or "placement."

Experience in the European countries has shown that the old type of labor exchanges rendering service in a passive way (that is, when the exchange officials merely register the applications for jobs and for workers and inform the parties of available vacancies and candidates) is next to useless, almost a waste of money, energy, and time.

In a well-functioning modern labor exchange up-to-date business methods are applied, such as soliciting business by canvassing, advertisement, and publicity, personally visiting employers for the purpose of getting first-hand information in regard to their working methods, conditions, needs, etc. At the same time the applicants for work are studied very closely, their training and experience, their health and character. The information supplied by an applicant himself is verified and supplemented by outside inquiries, usually from his last employer, and from the labor union if he belongs to one. The collected information is recorded on the registration card, which is correspondingly indexed. Such detailed information greatly facilitates a successful selection of candidates and vacancies to suit each other.

When an employer applies for help he has to state the qualifications of the workers he wants to engage, the pay, hours, and other conditions of work.

If there is a trade dispute, the employer has to state its existence and give his reasons for the dispute. At the same time the labor exchange has to secure a similar statement from the other party to the dispute, namely, the employees, and secure a statement of their reasons for the dispute. A candidate has to be informed of the existence of the trade dispute and of its causes as stated by both sides or given whatever information the labor exchange has been able to secure about the causes of the dispute. If the employer does not accept the candidate or the latter does not accept the offered job, in case of dispute, such refusal does not disqualify either the candidate or the employer from further service or benefits from the labor exchange.

The underlying principle of such methods is that the labor exchange should not take sides in the dispute in any manner and that the candidate should know the existence of the dispute and the causes of it as stated by both parties to the dispute. The information is usually conveyed to the candidate in writing. Either the statements of both sides are shown or read to him or his attention is called to a poster in the office containing the statements.

Training of the Unemployed

ALMOST all European countries have turned their attention to the fact that the unemployed workers are largely unskilled. Over 50 per cent of these workers are not established in any particular trade or occupation, and most of them never had any apprenticeship or proper training.

In Great Britain a committee was appointed on July 23, 1924, "to inquire into and report upon the conditions and prospects of British industry and commerce." This committee investigated the personal circumstances and industrial history of nearly 11,000 claimants to unemployment benefit. In regard to apprenticeship and training of these claimants the committee reported as follows: Among the

male unemployed only 23.7 per cent had been apprenticed, 24.6 per cent had been trained, and 57.7 per cent neither apprenticed nor trained; among the female unemployed workers only 11.1 per cent had been apprenticed, 53.3 per cent claimed to have some kind of training, and 35.6 per cent had been neither apprenticed nor trained.

The British labor exchanges reported that only about 7 per cent of the trained insured workers were receiving unemployment benefit, while general unemployment among the insured was about 12 per cent in 1926.

Some European countries, while suffering from unemployment, are attempting to import skilled workers from abroad (Soviet Russia). At the same time measures have been taken to prevent emigration of skilled workers (Germany).

Experiencing difficulty in finding jobs for the untrained unemployed workers, the labor exchanges in practically all European countries have become interested in the training of the unskilled unemployed workers. As a result, the vocational guidance and training work has been legally linked with the public labor exchange system in a number of the countries. However, the labor exchanges do not actually train the unemployed on their registry; they see that they get training. They select "trainees," watch their progress, and at the end of training try to find suitable jobs for them.

British experience.—Great Britain has given considerable attention to the training of the unemployed. After the close of the war crippled ex-service men were taught trades for which they were still fitted. For the young ex-service men whose apprenticeship was interrupted by the war opportunities were arranged to complete their apprenticeship. Nearly 100,000 ex-service men were assisted in training and the completion of their apprenticeship under direction of the public labor exchanges.

In regard to juvenile workers, boys and girls from 14 to 18 years of age, it was found that, after graduating from the schools, vocational guidance alone was not enough; they needed industrial training in addition. Accordingly the training of the juvenile unemployed workers was taken up in practically all important industrial centers as early as 1918, after the armistice. Daytime education centers were opened for those unemployed juvenile workers who were receiving unemployment benefits. The actual training is done under the direction of the board of education, with the public labor exchanges and private organizations, such as the Young Men's Christian Association, cooperating.

The unemployed juvenile workers drawing unemployment benefits are trained in practical handicrafts, such as dressmaking, patching and darning, dyeing, housewifery, cooking, and even domestic carpentry, for girls; and household carpentry, cabinetmaking, wood and leather work, picture framing, bookbinding, etc., for boys. The program also includes general education, such as English, arithmetic, history, singing, dancing, and various games and sports. A number of such training centers attained substantial success.

Money advanced by the board of education made it possible to open about 200 training centers in 1918 and 1919, but in 1920 the money support was withdrawn. This was later renewed, during the

winter of 1922-23, on the basis of 75 per cent by the State and 25 per cent by local governments, and about 100 training centers were reopened. At the end of 1923 there were 76 centers in operation, with an attendance of 7,539 unemployed juvenile workers drawing unemployment benefit. In 1924 there were 112 centers, with about 7,000 attendants; in 1925 there were 115 centers; and in 1926, 97 centers with a weekly attendance of nearly 7,000.

These centers have been operating only in the winter and only as an emergency measure, but the labor exchange authorities are now recommending that the centers operate throughout the year and be incorporated as a permanent feature into the system of public instruction in Great Britain.

As to adult woman workers, in 1920 a grant of £500,000 (\$1,832,135) to the central committee on women's training and employment was made by the vocational unemployment relief fund for the specific purpose of training women whose earning capacity was greatly reduced by the unemployment situation. The training, principally in handicraft, teaching, massage, nursing, midwifery, cooking, and other domestic and outside work, is given at so-called home-craft centers for unemployed female workers between 16 and 35 years of age. Up to the end of 1926 over 34,000 women had received training in home craft, nearly 500 had received industrial vocational training, and 352 had taken the clerical course.

Some training was also provided for adult male workers. At the end of 1925 four training centers were opened for unemployed casual workers under age 30 drawing unemployment benefits. The courses, lasting six months, consist in training in industrial handicrafts, and agriculture. At the end of November, 1927, there were 4,658 unemployed casual workers who had completed their training in agriculture for employment in agriculture overseas.

When a labor exchange finds an unemployed worker who is handicapped by lack of training but is otherwise promising, he is turned over to a technical committee attached to the exchange. This committee places the worker in training, after which the exchange tries to find a suitable job for him.

According to the reports of the labor exchanges the training of the unskilled unemployed workers greatly facilitates the finding of jobs for them.

Training in other countries.—Following the lead of Great Britain, the Union of South Africa has undertaken an extensive scheme of agricultural training of the unemployed unskilled workers on the registry of labor exchanges. Public labor exchanges in all European countries are promoting training of the unemployed unskilled workers on their registry in a number of ways.

There is a tendency to link up vocational guidance services with the system of public labor exchanges and to make these responsible for the training of the unemployed juvenile workers who lack vocational training. In Germany the act of July 16, 1927, makes public labor exchanges responsible for vocational guidance.

The unemployed lacking training in any trade are often referred to some private training class or to some employer who would be willing to accept such workers as apprentices. The labor exchange is always on the lookout for opportunities of training for unskilled

unemployed in the employers' establishments. Then, too, the public works for the unemployed are often so organized and conducted that the unemployed engaged could learn a trade on them. For instance, in Estonia the best specialists obtainable are hired to conduct handicraft "stations" to train the unemployed workers engaged in the stations. In the evenings lectures or courses, seldom of a technical nature, are held for the unemployed on the public works.

Compulsory Registration

THE public labor exchange systems in practically all countries have started on the basis of voluntary registration by the unemployed workers seeking jobs and by the employers seeking help. However, certain inducements were applied. First, no fee was charged for registry and service; second, any unemployment benefits either in the form of unemployment insurance benefits, normal and extended, or in the form of relief payments and relief work training, advancement of transportation expenses, etc., were granted only to those unemployed workers who were on the registry of the public labor exchanges.

The latest tendency in the development of the public labor exchange systems consists in the introduction of compulsory registration by both employees seeking work and employers seeking help.

A certain amount of compulsion was applied during the demobilization period. For instance, in Germany an order of February 17, 1919, required that employers seeking the help of not less than five workers must report vacancies to the public employment exchange. In Poland it was made compulsory for employers seeking workers for employment abroad to do so through the public labor exchange. In Switzerland it was made compulsory for employers to report without delay their vacancies to the canton labor exchange.

Almost all countries now have a law requiring that hiring of workers for employment abroad should be done through public labor exchanges, in order to have a better control over transfer of workers from one country to another.

Soviet Russia started out with a compulsory registration at the Soviet labor exchanges, but, owing to the "new economic policy" and principally to the lack of appropriations, the compulsion ceased to operate. Still, the Soviet labor unions are required to include in their collective labor contracts a clause providing that a certain proportion of workers are to be hired through Soviet labor exchanges.

The following more recent steps in the direction of compulsory registry might be cited:

In Poland an order of October, 1926, requires that in certain districts or in the case of certain classes of establishments defined by the ministry of labor employees are required, under a penalty for refusal, to register their vacancies and to hire workers for these through public labor exchanges.

In Czechoslovakia the ministry of social welfare issued an order on August 18, 1926, requiring that in case of dismissal of more than 20 workers at a time the employer must inform the labor exchange of his intention at least a week in advance.

In Italy the public labor exchanges were reorganized by the labor charter of April 21, 1927, according to which the registration for jobs and help and actual hiring through public labor exchanges is made compulsory.

To make sure that all workers are hired through public employment exchanges, under royal decree of March 29, 1928,³ the Ministry of Corporations may prohibit any private person from serving as an intermediary for placing workers, even if he does not get any compensation for his service, under penalty of fine or imprisonment.

Employers are prohibited, on pain of fine, to use the services of any intermediary or to hire workers who are not registered in the public employment exchange. However, the employers are at liberty to select employees from among registered unemployed workers, giving preference to those who are members of the Fascist Party and of the Fascist trade-unions.

After the experiment at compulsory registration in Soviet Russia, Italy appears to be the first country introducing a country-wide compulsory registration and hiring through the public labor exchanges.

Recent reports on the activities of public labor exchanges in a number of the European countries recommend compulsory registration for jobs and help and actual hiring through the public labor exchanges. Such measures, it is argued, will result in a complete organization of the employment field and in a complete public control over the latter. Then, too, the actual extent of unemployment at any given time and in any given country could be exactly determined, which, in turn, would greatly facilitate the effectiveness of the measures applied to combat unemployment.

Fees

ARTICLE 2 of the draft convention of the International Labor Conference of 1919 requires that no fee should be charged by the public labor exchanges to employees seeking jobs or to employers seeking help. This policy has been followed by practically all countries.

The public labor exchanges, having the advantage of being free, are gradually drawing workers and employers from the private labor exchanges charging fees for profit. Usually, rigid regulations are applied to private exchanges.

In Finland the act of March 27, 1926, requires that all private labor exchanges shall apply to the Government for permission to operate. Permission is granted only for three years and the size of the fees is definitely fixed in the application.

In Poland a law has been enacted abolishing the private labor exchanges in 1929.

The entire suppression of private labor exchanges charging fees for profit seems to be only a question of time in most of the European countries.

Conciliation of Disputes

IN SOME of the countries of Europe the public labor exchanges, usually through joint committees attached to them, act to conciliate industrial disputes. This is the case, for instance, in Belgium, Denmark, and Spain.

³ Gazzeta Ufficiale, Rome, May 18, 1928.

In Denmark the act of December 22, 1921, requires that if jobs in any establishment are repeatedly refused by the applicants sent by the public labor exchange on account of the existence of a dispute, such case shall be reported by the exchange to the director of labor in the Ministry of the Interior, who notifies the employer and workers in order that the dispute may be settled in accordance with the regulations relating to conciliation of industrial disputes. Until a settlement is reached no more applicants are sent to the employer from the public labor exchange.

All public labor exchanges in European countries are doing a certain amount of adjustment of the difficulties that often arise between employer and employee engaged through the public labor exchange. If an applicant sent is refused or if accepted is soon discharged, or if the applicant sent refuses to accept the offered job or, if he accepts it, soon quits it, the labor exchange at once interviews the parties and attempts to smooth out the difficulty. In this way many cases are adjusted without resorting to court and without causing a dispute of a more serious nature. If the labor exchange fails in its effort to settle the matter, the case, if serious, is reported by the exchange to an arbitration court or to the public prosecutor.

Thus both the employee and the employer find in the public labor exchange a certain amount of protection for their legitimate interests.

Outfitting the Unemployed for a Job

IT HAS become a practice of the public labor exchanges in a number of the European States to give material assistance in the form of loans for outfitting the unemployed for a prospective job. Transportation to a distant job is provided either free of charge or at a reduced rate, or the money for traveling expenses is advanced as a loan by the public labor exchange. In a case of need, tools and clothing are either given out of the store kept at the labor exchange for this purpose, or the necessary expenses for tools and clothing are advanced in the form of a loan. In some cases money is advanced even for living expenses till the first pay day.

These money and outfit advances are later gradually recovered by deductions from the wages in agreement with the employer. As a matter of fact, comparatively small losses are sustained on these money advances by the public labor exchanges. In many cases the employers are induced to make the necessary advances, which is much the better way, as it simplifies the recovery of the advances.

In Great Britain about 400 outfits of clothing were advanced by the public labor exchanges to those women who had completed training in home-craft centers and could get jobs as domestic servants if they had proper clothing. In some countries the public labor exchanges secure clothing from military stores free of charge to the unemployed (as in Estonia).

Office Location and Furnishings

IT USED to be customary in almost all countries to rent cheap office rooms in some back street in the city for a public labor exchange. The rooms were rather small, with poor office furniture, dark, and untidy. Such "economy" was found by experience to be

a gross mistake, an extravagant waste of money. For self-respecting applicants, employees and employers, avoided visiting such labor exchanges as much as they could. The untidy appearance of these exchanges led to the impression that they were some sort of charity makeshift affair for "hoboes" and "tramps." As there was not enough space in the office, the waiting crowd of unemployed workers, usually poorly clad, with anxious and downcast faces, surged back and forth on the street in front of the exchange.

As a result of these experiences attempts are now being made to locate the exchange in the business section on an important thoroughfare and to erect a large, imposing building for it. Several such buildings are already in existence in Great Britain. They contain large, adequate reading halls, a reading room, meeting halls for employees' and employers' associations, a restaurant, and even storage rooms for tools and clothing to be given to the unemployed in cases of need. The registration is done and interviews conducted in rooms separate from the waiting and other rooms. Specialized sections, such as for women, juveniles, or for certain occupations, have their own offices, usually with separate entrances. The rooms are well furnished and lighted, and are kept scrupulously clean and in order. The applicants feel themselves at ease and at home.

It has been found that the outlay of money for such buildings and furnishings pays, and there is a tendency toward improvement in this direction in practically all countries.

Conclusion

AS THE labor exchanges deal primarily with human beings—employees, employers, government officials, and the general public—the complexity and delicacy of the business of labor exchanges is apparent. If there ever was a business in which neutrality, freedom from politics, aggressiveness, promptness, and accuracy, and at the same time honesty and the human touch are required, it is the business of the labor exchanges.

The immensity of the scale of the activities of a well-developed system of public labor exchanges may be surmised from the fact that the largest number of record cards, containing names, dates, characteristics, and history, ever assembled together in any business concern, private or public, is found in the files of the public labor exchanges in Great Britain. There are about 12,000,000 wage earners insured against unemployment and there are millions who receive insurance benefit or relief payment, or are engaged on relief works or are changing jobs during a year. In 1926 there were on the staff of the British public labor exchange system 7,731 permanent employees and 8,455 temporary employees—16,186 in all.

The movement for the organization of the employment field is rather recent. Even now the comparatively well-established systems of public labor exchanges, such as in Great Britain, the Scandinavian countries, Germany, and other States, are still in an experimental stage, and the labor-exchange workers in their reports continue to recommend various changes and improvements.

Laws relating to national systems of labor exchanges in foreign countries up to 1927, not including laws and decrees relating to separate occupations

Argentine Republic: Act of September 25, 1913.

Australia: New South Wales—Part 10 of act of 1912 on industrial arbitration; amended in 1916, 1918, 1919, and 1920. Queensland—Act of December 23, 1915. South Australia—Order in council of July 30, 1911.

Austria: Notification of December 24, 1917; act of March 24, 1920.

Belgium: Royal decree, February 19, 1924; January 19, 1925; legal basis to the system previously existing by regulations.

Bulgaria: Law of April 12, 1925; of January 1, 1926; includes unemployment insurance.

Canada: Employment offices coordination act of 1918, amended in 1920.

Denmark: Act of December 22, 1921; act of March 4, 1924; act of July 1, 1928.

Estonia: Act of August 1, 1917, in force since 1919.

Finland: Order of November 2, 1917; act of March 27, 1926.

France: Act of March 14, 1904; decree of March 12, 1916; act of February 2, 1925.

Germany: Notifications of the Federal Council of June 14, 1916, of December 9, 1918, of May 5, 1920; act of July 16, 1927.

Great Britain: Labor exchanges act of 1909.

Greece: Act of July 1, 1920; royal decree of September 22, 1922.

Hungary: Order of the Minister of Commerce of February 17, 1917.

Irish Free State: Labor exchanges act, 1909.

Italy: Legislative decrees of November 17, 1918, and of October 19, 1919; Royal decrees of March 29, 1923, December 30, 1923, June 26, 1925, November 6, 1926, September 26, 1927.

Japan: Act of April 8, 1921; order of June 25, 1925.

Latvia: Administrative instructions of January 21, 1921.

Netherlands: Order of September 19, 1916; Royal decree of April 14, 1917.

Norway: Act of June 12, 1906; act of June 30, 1921; in operation since 1896.

Poland: Order of January 27, 1919; act of October 21, 1921; act of March 31, 1926, and numerous decrees.

Portugal: Decrees of July 27, 1912, and May 10, 1919.

Rumania: Act of September 22, 1921.

Russia: Decree of labor commissariat of August 21, 1924.

Serb-Croat-Slovene Kingdom: Order of December 10, 1927.

Spain: Royal order of September 29, 1920; act of July 13, 1922; Royal legislative decree of November 26, 1926, and of February 14, 1927.

Sweden: Decrees of June 30, 1916, and of May 16, 1918.

Switzerland: Federal resolution of October 29, 1909; general principles laid down for the working of employment exchanges of November 29, 1910; Federal resolution of October 29, 1919; act of November 11, 1924.

Union of South Africa: Act of July 25, 1924.

Unemployment Insurance in Foreign Countries

UNEMPLOYMENT insurance in Europe has had a rapid development since 1911, when the first national unemployment insurance act enacted in any country was put into effect in Great Britain. Prior to that time the trade-unions of Great Britain and certain continental countries had established the policy of paying regular allowances to members who were out of work, and later unemployment relief was granted by the public authorities of municipalities or communes of several countries, or the trade-union unemployment funds were subsidized from the public funds. France in 1905, Norway in 1906, and Denmark in 1907 introduced the latter system, known as the Ghent system, on a State, as opposed to a communal basis, but with certain important modifications, and these systems were the forerunners of the establishment of compulsory unemployment insurance on a national scale.

At the present time 18 countries in Europe and Queensland in Australia have either voluntary or compulsory insurance schemes, fostered and aided by the State, which are designed for the immediate relief of unemployment and which, in some instances, utilize the period of enforced idleness in training workers for jobs in which there is a better prospect of securing employment, or organize needed public works for the employment of the surplus workers.

Australia (Queensland)

UNEMPLOYMENT insurance in Queensland was established on a compulsory basis by the act of October 18, 1922. The act applies to all wage earners 18 years of age or over, whose wages are fixed under collective agreements or by arbitration decisions and also includes public officials.

The act established a fund which is supported by equal payments made by the Government, the employers, and the workers. The payments at first were fixed at 9d. (18.2 cents) per week for each employed worker, but owing to serious unemployment this amount was increased in July, 1927, to a total of 12d. (24.3 cents), the Government, the employer, and the worker each contributing 4d. (8.1 cents).

A worker who has contributed to the fund for six months or more is entitled, if unemployed, to a weekly payment known as a sustenance allowance, varying in amount according to locality and as between married and unmarried workers. Additional benefits are paid for each child under 16, but not to exceed four.

Benefits are payable, after a waiting period of 14 days, for a maximum of 15 weeks in one year. The act provides that if a worker becomes unemployed solely through his own fault he shall not be entitled to the sustenance allowance for a maximum period of two months, while if a worker leaves his employment voluntarily payment of the sustenance allowance shall be deferred for a period varying according to circumstances.

Austria

THE Austrian unemployment insurance law, enacted March 24, 1920, has been the subject of numerous amendments owing to the continued economic depression. The insurance is in theory compulsory for all wage earners, but certain classes, such as agricultural and forestry workers and domestic servants, are excluded.

The costs of the insurance system are divided among employers, employees, and the State and communes, the State paying 12 per cent, the communes 4 per cent, and employers and employees each paying 42 per cent.

Insured persons, in order to have a claim to unemployment benefit, must have been employed for at least 20 weeks within the previous 12 months in an occupation subject to insurance, but in necessitous cases this period may be fixed at 20 weeks in the previous 24 months. The benefit varies according to whether the worker is married or single or has other dependents, but it may not exceed 80 per cent of the last week's earnings.

The payment of benefit begins on the eighth day of unemployment. The normal benefit period was fixed by the act of December 17, 1927, at 30 weeks in a period of 12 months, but in periods of crisis this may be extended, the special allowance amounting to 80 per cent of the statutory benefit. There is a four weeks' period of suspension of benefit imposed on workers who give up their work without justifiable cause.

The act provides for "productive unemployment relief," financial assistance being granted by the State for the carrying on of public works which furnish employment for persons who would otherwise receive benefit. During periods of serious industrial depression the State may compensate employers to the amount of the unemployment benefit if they retain in their employment workers whom they are entitled to discharge.

Belgium

THE various decrees relating to unemployment insurance funds in Belgium, the first of which was issued December 30, 1920, were coordinated and amended by the orders of May 15 and December 10, 1924. The system of insurance is voluntary and applies in principle to the workers in all trades. Approximately 623,000 workers, mainly trade-union members, were insured against unemployment in the spring of 1928. The subsidy paid by the State to the funds was increased by a decree of March 21, 1927, from 50 per cent of the fees paid by the members of the funds to two-thirds of that amount. In addition, many of the communes voluntarily grant subsidies proportionate to the benefits paid by the funds. The contributions of members vary in the different funds and there is a corresponding variation in the amount of benefits paid, but the amount of benefits paid to the unemployed from all sources combined can not exceed, in any case, two-thirds of the wages paid to workers in the same category as the unemployed worker. Additional benefits are paid for children under 14 years of age and for those between the ages of 14 and 16 who are attending school or are physically incapable of working.

In order to receive unemployment relief, membership for at least one year prior to the payment of benefits is required, during which time the regular fees must have been paid.

Individuals excluded from unemployment relief include those who are incapacitated for work, those unemployed as a result of a strike or lockout, and persons who have been discharged from their former employment and who refuse to accept employment for which they are qualified.

Bulgaria

COMPULSORY unemployment insurance was established in Bulgaria by the act of May 5, 1925, effective January 1, 1926. The act applies to wage earners generally, between the ages of 15 and 60, with the exception of domestic servants and such workers and employees in the public services as are entitled to special benefits. Seamen are included, and those agricultural workers who are engaged in undertakings which are recognized in a special legislative act as "model" enterprises.

Benefits are paid from an unemployment fund established in connection with the social insurance funds and supported by contributions from the workers, the employers, and the State, at the rate of 1 leva (0.72 cent) per insured person per week. The State as an employer pays 1 per cent of the credits allowed for wages into the unemployment fund.

Benefits are paid for a maximum period of 12 weeks per annum, on condition that the insured person has been paying contributions for at least 52 weeks over a period of two years. The benefits are payable after the eighth day of unemployment and amount to 16 leva (11.5 cents) per day for heads of families, and 10 leva (7.2 cents) per day for unmarried persons.

In order to deal with acute unemployment the Minister of Commerce, Industry, and Labor and the Minister of Finance are authorized, on the advice of the Superior Labor Council and the Social Insurance Council, to organize public works for the unemployed and to order the reduction of hours of work and of wages in order to allow private undertakings to continue work. If an unemployed person is unable to secure work because of the inadequacy of his qualifications, he may be sent to a school by the employment exchange or may be compelled to take courses, but the period of study may not exceed the period for which unemployment allowance is paid.

Czechoslovakia

THE voluntary insurance system in Czechoslovakia, established by the act of July 19, 1921, applies in principle to wage earners in all trades, provided they are compulsorily insured against sickness. The employees' contributions vary from fund to fund and the State contribution is equal to one-half the benefits paid to unmarried workers, this amount being increased to two-thirds in the case of insured married persons who have been members of a trade-union for one year, or unmarried persons who have been members for five years, with a maximum contribution by the State, per person, of 12 crowns (35.5 cents) per day. Employers do not contribute.

Benefits amount to two-thirds of the normal wages of the insured person and may be paid for three months uninterruptedly or four months including interruptions.

Denmark

THERE is no State system of unemployment insurance in Denmark, but by the act of December 22, 1921, the voluntary insurance funds attached to the trade-unions are recognized by the State and receive subsidies from the State and the communes.

Membership in the funds receiving Government grants is restricted to wage earners between the ages of 16 and 60 whose resources do not exceed 15,000 crowns (\$4,000).

The State subsidy amounts to 35 per cent of contributions and the communal subsidy is optional, with a maximum of 30 per cent. Employers do not contribute to the primary funds but employers participating in compulsory industrial accident insurance are required to contribute 5 kroner (\$1.33) annually per worker to the reserve fund. In the case of agricultural and forestry workers the contribution is 2 kroner (53.3 cents). The contributions of workers vary from one fund to another.

The benefit may not exceed two-thirds of the normal wages provided it does not fall below 1 crown (26.7 cents) per day or exceed $3\frac{1}{2}$ crowns (93.3 cents) for unmarried workers and 4 crowns (\$1.07) for workers maintaining a family. There is a supplementary allowance for each dependent child, paid from the central unemployment fund. The length of the benefit period varies in the different funds but may not be less in any case than 70 days in a period of 12 consecutive months.

An act which came into force October 1, 1927, abolished the special and emergency benefits which were allowed during the period of depression. The State unemployment fund, from which subsidies were granted for this purpose, was greatly reduced as a result, and the employers' contributions were also reduced and will eventually be abolished altogether.

Finland

THERE is a voluntary insurance system in Finland established by an order of November 2, 1917, amended May 8, 1920. Persons between the ages of 15 and 60 are eligible for insurance.

Benefits are paid for 90 days in a period of 12 consecutive months, but after the maximum amount has been paid during 36 months, the payment of benefits is suspended for one year. The State subsidy varies from one-third to one-half of the benefit paid, the employers do not contribute and the employees' contributions vary according to the fund. The benefits paid range from 1 mark to 10 marks (2.5 cents to 25.2 cents) per day.

France

THERE is no State system of unemployment insurance in France, but the voluntary unemployment insurance funds have been subsidized by the State since 1905. The amount of the Government subsidy has been changed at various times according to employment

conditions. In 1927 the total payment by the Government to the departmental and municipal funds amounted to 60 per cent of the allowances granted by the funds but these subsidies applied only to 60 days' benefit in a period of 12 months. Membership in the funds is open, in principle, to all wage earners. The contributions of the workers and the benefits vary according to the individual fund.

Germany

THE German system of unemployment relief out of public funds was replaced by a system of compulsory insurance of workers and employees through the act of July 16, 1927, which came into force October 1, 1927. The insurance applies to all classes of workers liable to compulsory health insurance (the wage limit being 3,600 reichsmarks (\$857.83) per year), to employees covered by compulsory old-age and sickness insurance (limited to persons earning not more than 8,400 reichsmarks (\$2,001.61) annually), and to crews of vessels. Seasonal workers are also included. The number of wage earners insured against unemployment is approximately 18,200,000. Exemptions are made in respect of persons employed in forestry or fishing who live on the proceeds of their work and are in the employ of other persons less than six months a year, workers subject to long-term contracts, and apprentices serving an apprenticeship of not less than two years. The contributions, which are fixed by the executive board of the Federal Bureau for Employment and Unemployment Insurance, may not exceed 3 per cent of the wages or salaries forming the basis of calculation. The States and the Reich also contribute, the Government contributions being used to cover deficits in State labor districts and to create an emergency fund which may not fall below a stated amount.

The benefit includes the benefit proper and a family allowance amounting to 5 per cent of the wages or salaries received by the unemployed. The wages or salaries are divided into 11 classes, and in each wage class a standard wage or salary is set, a certain percentage of which constitutes the benefit. These standard wage rates range from 8 reichsmarks (\$1.91) per week for the lowest grade to 63 reichsmarks (\$15.01) for the highest, and the average benefit, including family allowance, ranges from 80 per cent of the standard wage for the lowest group to 60 per cent for the highest.

Benefits are payable for 26 weeks, beginning with the eighth day of unemployment, but in times of economic crisis persons who have exhausted their right to unemployment benefit are taken care of by the emergency relief fund. A resolution adopted by the Reichstag August 21, 1928, extended this additional benefit from 26 weeks to 39 weeks and for the unemployed over 40 years of age to a maximum of 52 weeks. The emergency fund is also used for the payment of benefits to unemployed persons who are deserving but who have not yet acquired a full claim to benefit. Such persons and young persons under 21 years of age are obliged to accept any work offered to them; the same requirement is made of other recipients of unemployment relief who have received benefits for nine weeks. Short-time workers receiving insufficient or irregular wages are granted a supplementary benefit out of the Federal bureau's funds. The bene-

fit is not granted during strikes and lockouts except in case of indirect participation to avoid special hardship.

The duties of the authorities include the institution of special measures for the prevention of unemployment. Aside from finding work for the unemployed, traveling expenses may be paid to workmen and employees being transferred to other places out of funds of the Federal bureau, also working equipment may be furnished and eventually there may be a limited contribution to the wages or salaries.

Great Britain

THE British national insurance act of 1911 introduced a compulsory unemployment insurance system in Great Britain which, as it was of an experimental nature, was applied only to workers in the building, engineering, and shipbuilding industries since these workers were particularly subject to unemployment. The law was gradually extended to cover other groups of workers through a series of amendments and in December, 1927, a new law was passed recasting and consolidating all the legislation dealing with unemployment insurance.

The unemployment insurance acts provide, subject to certain exceptions, for compulsory insurance against unemployment of substantially all employed persons. The principal classes of persons who are excepted from such compulsory insurance are juveniles under 16 years of age, and (since January 2, 1928) persons aged 65 and over, persons employed otherwise than by way of manual labor at a rate of remuneration exceeding in value £250 (\$1,212.63) per annum, persons employed in agriculture and private domestic service, and outworkers. Persons employed by local public authorities, railways, and certain other public-utility undertakings, members of the police forces, and persons with rights under a statutory superannuation scheme, may in certain circumstances also be excepted.

Contributions are paid by the employers, employees, and the State, the weekly rates of contribution being as follows:

WEEKLY RATES OF CONTRIBUTION UNDER BRITISH UNEMPLOYMENT INSURANCE ACT

| Sex and age | Employer's contribution | Employee's contribution | Government's contribution |
|--|-------------------------|-------------------------|---------------------------|
| | d. ¹ | d. | d. |
| Men aged 21 to 65 years..... | 8 | 7 | 6 |
| Women aged 21 to 65 years..... | 7 | 6 | 4½ |
| Young men aged 18, 19, and 20 years..... | 7 | 6 | 5½ |
| Young women aged 18, 19, and 20 years..... | 6 | 5 | 3¾ |
| Boys aged 16 and 17 years..... | 4 | 3½ | 3 |
| Girls aged 16 and 17 years..... | 3½ | 3 | 2½ |

¹ Penny = 2.03 cents.

Benefits are graduated according to the scale of contributions. Men and women between the ages of 21 and 65 receive 17s. (\$4.12) and 15s. (\$3.64) per week, respectively; young men aged 18, 19, and 20 receive a benefit of 10, 12, and 14 shillings (\$2.43, \$2.91, and \$3.40), respectively, while the benefits for young women of the corresponding ages are 8, 10, and 12 shillings (\$1.94, \$2.43, and \$2.91); and boys

aged 16 and 17 receive 6s. (\$1.46) and girls 5s. (\$1.21) per week. A weekly benefit amounting to 7s. (\$1.70) is allowed for one adult dependent and one of 2s. (48.5 cents) for each child under 14 who is maintained wholly or mainly by the claimant as well as for any child aged 14 or 15 who is under full-time instruction in a day school and is wholly or mainly maintained by the claimant. There is a waiting period of six days for which no benefit is payable. If a claimant satisfies the conditions governing the receipt of benefit he is entitled to this benefit as long as he is genuinely unemployed, but after the lapse of a reasonable interval he is required to accept any suitable work which may be offered him or further benefit will be withheld.

The law provides that grants may be made out of the unemployment fund toward the cost of approved courses of instruction for boys and girls of the ages of 16 and 17 who are insured or who are normally employed or likely to be employed in an insurable occupation.

There are certain causes which disqualify an insured contributor for the receipt of unemployment benefit for varying periods. These include loss of employment as a result of a strike, loss of employment through misconduct or voluntarily leaving employment without just cause, and imprisonment or confinement in a workhouse or other institution supported by public funds.

All claims for unemployment benefit and questions arising in connection with claims are determined by statutory officers known as insurance officers, and appeals from decisions are carried before a court of referees composed of a chairman appointed by the Minister of Labor and an equal number of representatives of employers and of the insured contributors.

Irish Free State

THE British unemployment insurance act of 1920 is still in force in the Irish Free State as the fundamental unemployment insurance act. The insurance is compulsory and the exemptions are similar to those specified in the British act. The maximum duration of benefit is 26 weeks, and the benefit for males aged 18 and over is 15s. (\$3.64), for females 12s. (\$2.91), and for those under 18 years of age, half of the above rates. Extra allowances are also paid for dependent children. The weekly contributions vary for men, women, young persons, and boys and girls.

Italy

THE Italian unemployment insurance system established by a decree of October 19, 1919, was reorganized by a decree issued December 30, 1923. By the terms of this decree a special insurance fund was created for each Province and for groups of Provinces but the general management was vested in the National Social Insurance Fund, thereby combining the administration of unemployment insurance with that of other branches of social insurance.

Unemployment insurance is compulsory for all wage earners of both sexes, 15 to 65 years of age, with the exception of agricultural workers; employees earning more than 800 lire (\$41.84) per month; employees in public or private establishments which guarantee steady employment; home workers; domestic servants; theatrical and

moving-picture artists; employees of the State, the royal household, Provinces and communes; and employees of charitable institutions and of State railroads and public transportation enterprises; and casual workers.

The insurance funds are supported solely by the contributions of the workers and employers. The contributions are fixed at 0.70, 1.40, or 2.10 lire (3.7, 7.3, and 11 cents) fortnightly, according to the wage earned by the insured person. The lowest contribution is paid for persons earning 4 lire (20.9 cents) or less per day and the highest contribution for those earning over 8 lire (41.8 cents). The employers are entirely responsible for the payment of these contributions, one-half of which is charged to the workers.

Benefits amount to 1.25, 2.50, and 3.75 lire (6.5, 13.1, and 19.6 cents) per day according to the amount of the contribution. These rates are payable only on condition that 24 contributions have been paid in to the credit of the claimant during the preceding two years. They may be paid for a period of 90 days, which may be increased to 120 days if 36 contributions have been made to the fund.

There is a national unemployment fund which assists provincial or interprovincial funds which are unable to meet the demands for unemployment relief. This fund receives part of the contributions paid to the provincial funds, the only contribution of the State being one-half of the fines received for contraventions of the legal provisions on unemployment insurance.

As a preventive measure against unemployment, the carriers of unemployment insurance may organize vocational courses, attendance at which may be made compulsory for unemployed persons in receipt of relief. The National Social Insurance Fund may advance money from the unemployment fund equal to one-fifth of the resources of the funds for the carrying out of general or local public utility work.

Luxemburg

UNEMPLOYMENT allowances in the Grand Duchy of Luxemburg are regulated under an act of August 6, 1921. The State advances the funds necessary for the payment of benefits, thereafter recovering one-quarter from the municipalities and one-half from the employers and workers.

A decree of February 9, 1927, amending the rate of allowance, advanced the maximum benefit from 3 francs (8.3 cents) per day to 9 francs (25 cents). The family allowances were also increased so that the maximum allowance of a skilled worker is now 15 francs (41.7 cents) per day.

The right to benefit begins on the third day of unemployment and if unemployment exceeds eight days it is retroactive to the first day.

Netherlands

VOLUNTARY unemployment insurance in the Netherlands was established by an order of December 2, 1916, which has been the subject of various amendments since that time. It applies in principle to wage earners in all trades.

The State contributions vary from an amount equal to that paid by the insured persons to twice that amount. Half of the amount

paid by the State is recovered from the communes. The employees' contributions vary between the different funds and employers do not contribute.

The normal benefit period is 60 days per year for persons regularly employed and 36 days for seasonal workers.

Norway

VOLUNTARY unemployment insurance funds in Norway are subsidized by the State, the Government paying 50 per cent and in exceptional cases two-thirds of the benefit. Two-thirds of these amounts, however, are recovered from the communes. Membership in insurance funds is open in general to all workers. The benefits amount to 50 per cent of the normal salary. The regular benefit is for a period of 90 days per year, and in exceptional cases may be increased to 120 days.

Poland

AN UNEMPLOYMENT insurance law was passed in Poland July 31, 1924, which provided for compulsory insurance of all wage earners over 18 years of age who are under contract in industrial, mining, metallurgical, or commercial undertakings, in transport undertakings, or in all other enterprises which although not conducted for profit are managed on the same principles as industrial undertakings, provided they employ more than five workers. Intellectual workers were included in a decree of May 1, 1927.

The funds are maintained by contributions by the State, the employers, and the employees, amounting to 3 per cent of the wages paid to the insured workers. Of this amount, the State pays 1 per cent, the employers 1½ per cent, and the employees one-half per cent. The State is entitled to recover from the communes one-half of the amount it contributes.

In order to be eligible for unemployment benefit it is required that a claimant shall have been employed for at least 20 weeks during the year preceding the declaration of unemployment in an undertaking liable to compulsory unemployment insurance.

Allowances for unmarried workers amount to 30 per cent of the wage last received; for those with from one to two dependents, 35 per cent; for families with from three to five dependents, 40 per cent; and for families of over five, 50 per cent. In computing these allowances, however, any part of the wage in excess of 5 zlotys (56 cents) per day is not taken into account. There is a waiting period of 10 days before benefits are paid.

The normal benefit period is 13 weeks but in exceptional cases may be extended to 17 weeks. The right to unemployment allowance is forfeited if suitable employment at a normal wage offered by the State employment office is refused, an exception being made of employment in an establishment involved in a strike. Employment will be considered suitable if it does not endanger health and if it does not involve the worker in any difficulty in resuming his ordinary occupation. It is permissible to refuse an offer of employment if housing accommodations can not be secured in the neighborhood of the place of employment.

Russia

THE payment of unemployment benefit in Russia is based on the labor code adopted November 9, 1922. Insurance is compulsory but the employers bear the entire cost. As a large number of the undertakings are nationalized, however, this amounts to a State contribution in the case of these industries.

The maximum benefit period is fixed at nine months for each year of unemployment.

Benefits were fixed by a regulation dated December 14, 1927, as follows: The workers are divided into three classes of which members of the first class (which consists of intellectual workers holding a university degree, members of the Communist Party who had held posts involving responsibility, technicians, engineers, foremen, etc., skilled workers in industry, and demobilized soldiers) receive benefits varying from 11 chervonetz rubles (\$5.67) per month in the zone where the cost of living is lowest, to 26 rubles (\$13.39) in the zone where it is highest. The second class consists of teachers in elementary or secondary schools; doctors of average skill; officials of the railway, river, transport, and postal services; heads of shops and salesmen in retail, or retail and wholesale enterprises; artists of average skill, intellectual workers, and skilled office workers; and salaried workers who are half skilled or less. These workers receive benefits varying from 8 to 19 chervonetz rubles (\$4.12 to \$9.79) according to the cost of living. Members of the third class (which is made up of intellectual workers of less than average skill, subordinate salaried employees, unskilled workers, and domestic workers) receive benefits varying from 6 to 15 rubles (\$3.09 to \$7.73) per month. Additional allowances are granted for dependents. In addition to the regular benefit, trade-union members are entitled to a special benefit varying in amount according to their length of membership.

Benefit is payable to unemployed persons in the first class irrespective of the period during which they have been employed as wage earners. This applies also to industrial workers who are trade-unionists who come within the second class; to young persons under 18; to soldiers of all ranks who have been definitely or temporarily demobilized or transferred to the reserve; and to persons disabled in industry who have recovered their ability to work. Workers in the third class belonging to trade-unions are not entitled to benefit unless they have worked as wage earners for six consecutive months before becoming unemployed; for salaried employees who are members of trade-unions the qualification period is 12 consecutive months, and for all other classes of unemployed, 36 consecutive months. Unemployed persons must have been registered at an employment office or trade-union within three months of loss of employment.

Emergency relief works are organized by the unemployment relief institutions and a bimonthly system of rotation on these works is used so as to benefit as large a number of the unemployed as possible.

Refusal to work without good reason or failure to register regularly at the employment exchange will deprive workers of benefit for one month and a second offense will result in being permanently dropped from the rolls.

Spain

THE Spanish insurance system is voluntary but is subsidized by the State, the decrees governing the operation of the system having been issued March 18, 1919, and April 27, 1923. The insurance applies to wage earners between the ages of 18 and 65 whose annual earnings do not exceed 4,000 pesetas (\$661.30).

Benefits may not exceed 60 per cent of the daily wages and the maximum benefit period during which funds may pay unemployment benefits is 90 days per annum, subject to the penalty, if this is exceeded, of the loss of Government subsidies. Local, provincial, or national unemployment insurance associations may receive the State subsidies.

Switzerland

A LAW was passed in Switzerland October 17, 1924, which placed on a permanent basis the system of subsidizing the voluntary unemployment insurance funds. The law fixed the amount of the subsidy paid by the Federal Government at 40 per cent of the benefits paid out in the case of public and private unemployment funds administered by joint bodies of employers and workers, and at 30 per cent in the case of funds established by trade-unions. These rates may be temporarily increased 10 per cent by the Federal Assembly.

The daily unemployment benefit may not exceed 60 per cent of the insured person's daily normal earnings if he has dependents and 50 per cent in the case of persons without dependents.

The normal duration of benefit is 90 days in a period of 360 days, but this may be prolonged in exceptional circumstances. The payment of unemployment benefit may not begin until three days after registration of the unemployed insured person at a public employment exchange.

Persons are excluded from receiving benefits if they are out of work as a result of a strike or if they are incapacitated for work. Benefits are forfeited if an insured person refuses to accept suitable work, if he does not comply with the regulations of the fund, or for fraudulent attempts to obtain benefit.

In cases of partial unemployment (part-time or short-time work) unemployment benefit may be paid but the benefit plus wages may not exceed 80 per cent of the normal earnings of persons with dependents, and 70 per cent in the case of those without dependents.

Unemployment Conditions in Europe in the Latter Part of 1928

OFFICIAL statistics for the late summer of 1928 indicate that unemployment continues to be a serious problem in most European countries—a problem, moreover, which will almost certainly become more serious with the coming of winter.

Among the larger industrial countries, employment conditions seem to be particularly bad in the United Kingdom and in Germany. In Great Britain and Northern Ireland there were in September, 1928, 1,355,011 reported unemployed among those covered by the national insurance act, or 11.5 per cent of the total so covered, and this number

was considerably higher than at the same time in the previous year. In Germany, the August, 1928, reports showed 574,475 persons in receipt of unemployment benefit, as against only 403,851 in August, 1927.

In both Austria and Czechoslovakia the number of persons in receipt of unemployment benefits was larger in the late summer of 1928 than for the corresponding period of 1927. The number in Austria was 143,447 in 1928 as against 135,938 in 1927, these figures indicating a very unfavorable situation when the size of the industrial population is considered. In Czechoslovakia, on the other hand, although the number of persons receiving benefits increased during the year, the total number (13,627 in July, 1928) was not sufficiently large to be significant, assuming that such figures may be taken as reflecting at all accurately the absolute amount of unemployment in the country.

In general, of course, such an assumption is never strictly accurate. In no country is there a periodic census of all idle workers. The unemployment statistics published are based on more or less limited groups, such as trade-union or insurance membership. Therefore, they do not show the absolute amount of unemployment but they do show the trend of employment and also they do show the minimum number out of work at any time. If this minimum, as reported, is high in proportion to the size of the industrial population, conditions are evidently bad. Thus, in Italy, while there was a decline in the number of registered unemployed from 291,821 in August, 1927, to 248,100 in August, 1928, the latter figure is still sufficiently large to indicate the existence of a definite unemployment problem.

France and Belgium, according to the available reports, continue to show an extremely favorable employment situation. In France the number of persons in receipt of benefit was reported as less than 1,000 in August last. In considering this figure, however, it should be noted that the French benefit funds, from which published employment statistics are derived, are local in character. As a result, the number of persons seeking these funds for relief forms probably a smaller proportion of the total unemployed than in countries such as Great Britain and Germany, which have comprehensive national insurance systems coordinated with national systems of labor exchanges.

The Irish Free State, with 9.3 per cent of its insured workers out of work in the late summer of 1928, shows a slightly worse condition than in the year previous, and almost as high a rate of unemployment as the United Kingdom.

The Scandinavian countries all show improvement over 1927, but in Denmark and Norway the unemployed trade-unionists formed 13 per cent of the total. In the Netherlands, conditions were better in the late summer of 1928 than in the corresponding period of 1927, but the percentage of unemployed members of insurance societies was 5 as against less than 1 per cent in the neighboring country, Belgium.

The greatest improvement in employment conditions in Europe during recent months seems to have occurred in Poland. Between August, 1927, and August, 1928, the number of registered unemployed decreased from 159,365 to 88,593, the lowest figure reported for a number of years.

The table following gives, for each of 18 European countries, unemployment data for the late summer or early fall of 1927 and 1928:

UNEMPLOYMENT IN EUROPE IN LATE SUMMER OF 1927 AND 1928

[Except where otherwise indicated, data are for August of each year]

| Country, and class of unemployed | 1927 | | 1928 | |
|--|------------------------|-------------------|------------------------|-------------------|
| | Number | Per cent | Number | Per cent |
| Austria (persons in receipt of benefit)..... | 135,938 | | ¹ 143,447 | |
| Belgium (members of unemployment insurance societies)..... | 7,542 | 1.2 | 3,376 | 0.5 |
| Czechoslovakia (persons in receipt of benefit)..... | ² 11,845 | | ² 13,627 | |
| Denmark (workers covered by trade-union and employment exchange statistics)..... | 45,300 | 16.3 | 35,599 | 13.1 |
| Estonia (persons registered)..... | 809 | | 467 | |
| Finland (persons registered)..... | 1,221 | | 857 | |
| France (persons in receipt of benefit)..... | 14,825 | | 904 | |
| Germany: | | | | |
| Trade-unionists..... | 194,635 | 5.0 | 288,375 | 6.5 |
| Persons in receipt of benefit..... | 403,851 | | 574,475 | |
| Unemployed in receipt of emergency relief..... | | | ³ 80,214 | |
| Hungary (trade-unionists)..... | 11,247 | | 13,355 | |
| Irish Free State (compulsorily insured persons)..... | 22,122 | 9.0 | 22,843 | 9.3 |
| Italy (persons registered as totally unemployed)..... | 201,821 | | 248,100 | |
| Latvia (persons registered)..... | 944 | | 965 | |
| Netherlands (members of unemployment insurance societies)..... | 19,525 | 6.6 | ⁴ 14,728 | ⁴ 5.0 |
| Norway: | | | | |
| Trade-unionists..... | | ⁵ 17.3 | ⁵ 2,208 | ⁵ 13.0 |
| Persons registered..... | 15,727 | | 15,817 | |
| Poland (persons registered)..... | 159,365 | | 88,593 | |
| Sweden (trade-unionists)..... | | 7.8 | | 7.1 |
| Switzerland (persons registered)..... | 8,854 | | 6,523 | |
| United Kingdom (compulsorily insured persons) ⁶ | ⁶ 1,126,267 | ⁶ 9.3 | ⁶ 1,355,011 | ⁶ 11.5 |

¹ To make this figure comparable with that for 1927, old-age pensioners have been included, although under an act effective Oct. 1, 1927, such pensioners were separated from persons receiving unemployment benefits. This figure can only be considered as an approximation, as the number of old-age pensioners still actively employed could not be ascertained.

² July.

³ The German unemployment insurance act which came into force Oct. 1, 1927, provides that after the expiration of 26 weeks' payment of benefits unemployed persons are to be transferred to the emergency relief roll. (Labor Review, October, 1927, p. 68.)

⁴ Provisional figures for Aug. 20 to 25.

⁵ Great Britain and Northern Ireland. Includes those temporarily stopped.

⁶ September.

The following details for certain countries are taken from authoritative sources with a view to supplementing the statistical outline of the unemployment situation in 1928 given in the preceding table. They emphasize the gravity of the situation in certain countries, such as Germany and the United Kingdom and also stress the favorable employment trend in certain other countries, notably Belgium, France, Finland, and Poland.

Belgium.—On August 17, 1928, business was reported as surprisingly active. There was practically no slowing down of production during the summer period. An official cable of October 12, 1928, to the United States Department of Commerce stated that there had been some complaints of a labor shortage in certain quarters, especially in the most active districts. (Commerce Reports, August 27, 1928, p. 531, and October 22, 1928, pp. 214, 215.)

Czechoslovakia.—In August, 1928, the high level of industrial activity continued. (Commerce Reports, September 10, 1928, p. 655.) The American vice consul at Prague, however, reports under date of September 24, 1928, that according to a recent decision of the ministerial council, the validity of the governmental decree of De-

ember 23, 1924, with reference to Government cooperation in unemployment relief, has been extended to the close of the current year. Under this provision "married members of labor unions and other union workers who can prove a 5-year membership in their unions are entitled to an additional Government subsidy equal to one-half of the allowance paid from the funds of the labor unions."

Denmark.—In August, 1928, the commercial and industrial situation continued slowly and steadily to improve. There was less unemployment than in the preceding month. Activity in shipping was general. (Commerce Reports, September 10, 1928, p. 654.)

In September both commerce and industry were on the rise. Increased activity reported in building operations, outdoor work, and smaller trade reduced the number of the unemployed to about 35,000 at the close of August. (Commerce Reports, October 8, 1928, p. 85.)

According to a report under date of October 4, 1928, from the vice consul at Copenhagen, Danish unemployment did not show an increase in September as was expected in view of the seasonal slowing down of open-air activities. This is taken as a clear indication of "an improved situation in the Danish industrial world."

Estonia.—The decrease of unemployment in the summer of 1928 is attributed almost entirely to employment work which the Government has arranged and which keeps busy an average of 3,630 persons per month. In the city of Tallinn an expansion in building activities has tended to reduce the number of unemployment registrations.³

Finland.—Industry continued to be active in August, 1928. Although the dock workers' strike was still in progress, loading and discharging at the ports were proceeding about normally, as the labor supply was abundant. (Commerce Reports, September 3, 1928, p. 592.) In September calls for harvest labor increased and the number of unemployed was practically negligible. (Commerce Reports, October 8, 1928, p. 85.)

France.—Early in September, 1928, the outlook for French business was reported as "distinctly good." (Commerce Reports, September 17, 1928, p. 715.) Later information indicates that business continued steadily to improve, the situation in chemicals and in iron and steel being particularly strong. Some progress was being made toward cutting production costs through industrial rationalization. Cereal crop estimates were encouraging. (Commerce Reports, October 15, 1928, p. 151.) Heavy foreign and domestic demands have maintained activity in the iron and steel industry but increase in production has been impeded by a labor shortage. (Commerce Reports, October 22, 1928, p. 211.)

Germany.—In the early part of August, 1928, business conditions "were still at a high level." but there was a definite trend toward a slowing down which is ordinarily expected in the fall. It was thought that the production peak for most commodities had been reached in May, but the 1928 high mark in wholesale and retail trade and in the transportation of goods was expected in the early fall. (Commerce Reports, August 20, 1928, p. 462.)

The August records of unemployment exchanges, unemployment insurance, and trade-unions evidence a continuation of the industrial

³ Consular report from Tallinn, Oct. 12, 1928.

decline resulting from the cessation of large-scale labor absorption by the building trades and agriculture. (British Ministry of Labor Gazette, October, 1928, p. 380.)

On August 21, 1928, a resolution was adopted by the Federal Government "to extend the so-called emergency relief for the unemployed from 26 weeks to 39 weeks, and for unemployed over 40 years of age, even to 52 weeks. The emergency relief takes care of the unemployed who have been dismissed from the relief after having received doles for 26 weeks uninterruptedly." (Commerce Reports, October 1, 1928, p. 23.)

Business conditions were less satisfactory in September than in August, and a further slight increase in unemployment occurred. Early in October it was anticipated that there would be a more rapid extension of unemployment especially as the agricultural and seasonal work had been practically completed. (Commerce Reports, October 22, 1928, p. 216.)

Great Britain.—The Economist (London) of July 28, 1928, states that "the hope so long entertained that our large mass of unemployment would prove to be a temporary phenomenon seemed this year about to be fulfilled at last. But the fact that, at a time when the currency chaos in Europe has largely disappeared and the disproportion between British and foreign prices is beginning to narrow, the numbers of unemployed have risen from 1,032,000 a year ago to 1,239,000 at the end of June, 1928, has strengthened the growing feeling that we must take a more serious view of the situation."

In September there was little change in employment on the whole as compared with the previous month. Although some slight improvement was reported in the coal industry, the situation was still bad. Some improvement in employment was reported in the iron and steel, pottery, boot and shoe, and furnishing industries. The following industries, however, showed a decline: Marine engineering, shipbuilding, tin plate, woolen and worsted, silk, textile bleaching and dyeing, tailoring, building, and transport. (British Ministry of Labor Gazette, October, 1928.)

According to the report of the Industrial Transference Board, a summary of which is given in the August, 1928, number of the Gazette, "it would be unwise to estimate the permanent surplus in the coal-mining industry at any figure below 200,000." It is also pointed out in the same document that at the close of May, 1928, there were more than 100,000 men totally unemployed in shipbuilding, iron and steel, and heavy engineering, but that some of them might "expect to be reabsorbed."

The same issue of the Gazette also carries an account of the action taken or proposed by the Government largely in view of the recommendations of the transference board, with regard to migration, training schemes, juvenile unemployment centers, appropriations for afforestation, and Canadian harvesters' schemes. The September, 1928, issue contains the Prime Minister's appeal to some 150,000 employers for their practical help in the transference of the unemployed from the depressed areas.

Hungary.—During the first six months of 1928 the business trend was unfavorable, as it had also been in the latter part of the preceding year. The prospects for an excellent crop, however, indicated a sub-

stantial improvement for the latter part of 1928. The economic life of the country depends largely upon the crops, agricultural conditions most directly affecting those industries whose domestic market varies according to the farmer's purchasing power. (Commerce Reports, September 17, 1928, p. 708.)

Italy.—Basic conditions in August were about the same as in the two preceding months and were expected to remain at about the same level until the late autumn. There were indications, however, that the situation had decidedly improved since the beginning of 1928, as employment had increased and industry was reopening after temporary suspension. Furthermore, the banking situation was declared to be sound and fine crops were anticipated. (Commerce Reports, September 10, 1928, p. 655.)

There was some little improvement in both industry and commerce during September, 1928, and a more optimistic attitude is noticeable except in the northern Adriatic sections of the country, where the inactivity in shipping and shipbuilding has had an unfavorable effect. There was a widespread feeling that "the synchronizing of prices and costs to the new lira valuation" had been accomplished and it was expected that remunerative operations in the majority of industrial lines would be possible with the increasing demands of this winter's trade.

At the close of the harvest season the total volume of employment rose slightly as a result in part, it is reported, of the better situation in the textiles and heavy industries. (Commerce Reports, October 8, 1928, p. 86.)

The Netherlands.—The passing of a calm summer has accentuated the generally favorable trend of economic conditions. There has been an improvement in industrial relations and the outlook is good for an expansion in a number of domestic industries. (Commerce Reports, October 22, 1928, p. 216.)

Norway.—In August, 1928, industry and commerce were somewhat seasonally dull, shipping was rather quiet, although orders for new ships were increasing. Agriculture was still unsatisfactory and the crop outlook was not encouraging; fisheries, on the other hand, continued satisfactory. The labor situation continued to improve and the number of unemployed was reduced as compared to the previous month. (Commerce Reports, September 10, 1928, p. 654.)

Poland.—On the whole, the favorable trend in the State finances and in trade and industry was maintained without substantial change for the first six months of 1928. Operation and production in the chief industries exceeded considerably the average for the first six months of the preceding year. The number of workers registered as looking for employment was 116,000 at the close of June as compared to 179,000 in February. (Commerce Reports, October 1, 1928, pp. 5 and 7.)

Further improvement was reported in the unemployment situation during August, 1928, the number out of work being only 88,593—a decrease of 9,383 as compared to the preceding month and the lowest figure for a number of years. Among the factors contributing to the encouraging condition of the labor market are the constant development of production and certain seasonal influences, for example, increased calls for workers in the building and agricultural

industries. (Report from American Consul at Warsaw, September 28, 1928.)

Sweden.—A settlement of the iron ore strike was effected on August 8, 1928. Since the beginning of the year this industrial controversy has caused serious disturbance in the economic situation of the country. General improvement is expected to follow the adjustment of this outstanding industrial conflict. In mid-August economic conditions were basically sound but somewhat unfavorably influenced by labor disputes and the poor outlook for crops. (Commerce Reports, August 27, 1928, p. 532.)

A consular report, dated October 1, 1928, from the Goteborg district stated that in August of this year the number of male applicants to 100 jobs, according to the Goteborg Labor Bureau, was only 225 compared to 368 in the same month in 1927. A shortage of skilled applicants was reported in several kinds of work, as was also a dearth of qualified agricultural labor.

Another consular report, under date of October 16, 1928, indicated that in the Malmo district the number of applicants to 100 available positions was slightly higher in the third quarter of 1928 than in the same period of 1927, the ratio for the later period being 165 as compared to 160.

Switzerland.—The business situation continued favorable in September and the prospect for the future was good. Government receipts were unusually large and building operations, particularly garage construction, were reported as having been heavy. A slight seasonal rise in unemployment was recorded for August, but on September 27 it was stated that there was a dearth of workers in the building trades and that labor in the textile, metal, machinery, and watch trades was well occupied. (Commerce Reports, October 8, 1928, p. 89.)

Unemployment and Business Stability in Australia

A RECENT governmental report¹ on unemployment and business stability in Australia deals with the methods of counteracting seasonal fluctuations so as to insure as far as possible a continuity of operations in industry and the steps to be followed in the study of business conditions generally, with a view to promoting greater knowledge of the causes and effects of trade depressions and lessening the severity of the unemployment which results from them. This report embodies the first serious attempt in Australia to deal with the problem of unemployment, a question which may be expected to become of increasing importance as the business and industrial organization of the country develops. The report is confined to the question of unemployment which is the result of economic depression, excluding unemployment due to causes such as illness, accident, industrial disputes, and old age.

¹ Australia. Development and Migration Commission. Report on unemployment and business stability in Australia. Melbourne, 1928.

Unemployment Statistics

STATISTICS of unemployment in the Australian Commonwealth relate to trade-union members only. The total number of workers in 1926 was approximately 1,900,000, of whom slightly more than 850,000 were members of trade-unions. Of this number, about 415,000 were covered by unemployment reports, constituting 21.9 per cent of the total number of union and nonunion employees in the country. The trade-union reports relate to unemployment due to lack of work, sickness and accident, and miscellaneous causes, but do not include unemployment resulting from industrial disputes. The reports are made quarterly and show the total membership of the unions and the number of members who were out of work three days or more during the last week of the middle month of each quarter, with the exception of those unemployed as a result of strikes and lockouts. While the returns do not constitute a record of the absolute volume of unemployment, it is considered that the figures published do furnish a fair illustration of the general trend of unemployment. The unemployment records, which have been kept since 1906, show that unemployment has been greater since the war than before and that there have been both seasonal and periodical unemployment movements.

The periodicity of unemployment is shown by the following table, which gives the numbers unemployed and the percentage of the total number covered in the reports for the periods of most acute unemployment, from 1914 to 1925, and for purposes of comparison, by quarters during 1927 and the first quarter of 1928.

| Period | Number of trade-union members unemployed | Per cent unemployed |
|--------------------------|--|---------------------|
| 1914—Third quarter..... | 30,367 | 10.7 |
| Fourth quarter..... | 27,610 | 11.0 |
| 1915—First quarter..... | 33,465 | 12.0 |
| 1921—First quarter..... | 39,346 | 11.4 |
| Second quarter..... | 45,622 | 12.5 |
| Third quarter..... | 41,979 | 11.4 |
| 1924—Fourth quarter..... | 41,420 | 10.3 |
| 1925—Second quarter..... | 36,490 | 10.2 |
| 1927—First quarter..... | 26,280 | 5.9 |
| Second quarter..... | 29,217 | 6.4 |
| Third quarter..... | 29,991 | 6.7 |
| Fourth quarter..... | 38,641 | 8.9 |
| 1928—First quarter..... | 45,638 | 10.7 |

Causes of Unemployment

THERE is no uniformity of opinion as to the causes of unemployment which are of the greatest importance. In Australia, at the time of the census in 1921, about one-fourth of the total number of employed workers were engaged in pastoral pursuits or in agriculture. These primary industries employ a considerable amount of seasonal labor in sheep shearing, at harvest, and on fruit farms in the picking season, or in sugar-growing areas in the cane-cutting season. The secondary industries are subject to alternate slack and busy seasons caused by conditions limiting production and those caused by fluctuations in demand and consumption. Irregularity of public expenditure is also a factor in the seasonal demand for labor in Australia,

as the depletion of appropriations toward the close of a fiscal year or the delay in the provision of funds in a new financial year is an important factor where public expenditure is large as in that country. There are various other causes of fluctuations in the demand for labor. These include weather conditions, price movements, imports, exports, credit conditions, and exchange conditions and the balance of payments.

Industrial change is another cause of unemployment which is brought about by the decline of specific trades and industries (as, for example, the mining industry, which employed in 1926 less than half the number employed in 1907) and by the progress of invention and the mechanization of industry. As a result of improvements in the means of production by invention and the application of machinery there is often delay in the absorption of those displaced as a result of the new methods employed. The absorption of such workers into other industries takes place with a minimum of friction when business is active, but in times of general depression their transference becomes more difficult.

Another factor in the unemployment situation is the labor reserve. As the supply of labor is usually sufficient to meet the demands of industry during the periods of greatest activity, it follows that there is a surplus in periods of lesser activity. This results in a body of workers who are dependent upon casual employment. In addition to the large number of casual workers who are employed intermittently there is in every community a certain proportion of persons who are unemployable for such reasons as criminality, invalidity, and incompetence due either to weakness of will or of intellect. This class is said to be small in Australia, but there is another class not far removed, namely, the partially employable—those who secure work now and then but who are unable, either through disinclination or incompetence, to remain long on one job. This class is increased constantly from the ranks of the casual workers who, through inability to secure steady work, lose the inclination and the capacity for continuous effort. From this point of view this class becomes a factor in the unemployment situation.

It has been a disputed question as to how great an effect migration has upon the employment situation in Australia. The hasty conclusion has often been expressed, it is said, that high unemployment in Australia is caused by excessive immigration. An examination of the relationship between immigration and business conditions shows, however, that the tendency is for high unemployment to be associated with low immigration and it seems to be true that immigration is not a fundamental cause of unemployment and that the flow of migration into a country will, to a great extent, automatically adjust itself to the economic conditions of the country.

Study of the effect of the rigidity of the wage system on the increase of unemployment failed to show that high wages are a major cause of fluctuations in employment in Australia. The public regulation of wages is regarded as having the effect of making wage rates more rigid than they would be otherwise, and, therefore, in a period of falling prices the methods of fixing wages have the effect of aggravating the unemployment; but, on the other hand, in a period of rising prices the increased margin between labor costs and selling prices increases

business prosperity. It is said to be noticeable, however, that where wage awards are applied to certain primary industries dependent on overseas markets, the immediate effect is both to restrict the volume of employment and to create fluctuations. In that case rural employers are inclined to dismiss all but the most indispensable employees and to restrict their employment to busy seasons. This is the first reaction against higher costs that can not be passed on; the second, an increased effort for greater efficiency, is much slower in achieving results.

The effect of industrial disputes on unemployment is difficult to measure in Australia owing to the fact that the general unemployment statistics exclude those unemployed because of strikes or lockouts. These data are collected separately and on a different basis, the general unemployment statistics relating to the number unemployed at a particular time while the statistics relating to industrial disputes give the number of working-days lost from that cause and also cover a wider field than the unemployment statistics. It is stated that there is reason to believe that although the amount of unemployment due to scarcity of work is far greater than that caused by industrial disputes, the latter is nevertheless a serious factor, as it is considered that much unemployment which appears to be due to economic depression may be the indirect effect of an industrial dispute. Industrial unrest also tends to create a feeling of insecurity which hinders the development of new enterprises.

Methods for Preventing and Remedying Unemployment

IN THE discussion of the methods which should be followed in preventing unemployment it is stated that the first essential is the improvement of the unemployment statistics. The collection of figures should be continuous rather than periodic and the absolute volume of employment and unemployment should be recorded. The classification both as to causes and industries affected should be made more comprehensive and the various States should publish the statistics of employment and unemployment separately. The greatest difficulty in securing accurate data is considered to be the diversity of methods and agencies by which jobs are filled. The improvement of the methods of recording the statistics of employment and unemployment is believed to depend upon the establishment of a more uniform system of employment bureaus under Government control. The advantages offered by a more uniform system would be the increase in the mobility of labor, the more rapid filling of vacancies, and avoidance of the evils of chance selection. It would tend to abolish the labor reserves of individual industries and would thus reduce the aggregate number of workers involved. The surplus or the lack of labor in different industries would be brought out in this way and it would show the growth or decline of separate industries and would facilitate the transference to other industries of workers thrown out of employment in declining trades. Such a system would also facilitate the determination of the unemployable element, furnish a basis for vocational guidance, and provide the necessary information in any scheme of unemployment insurance.

Other methods of meeting the unemployment problem include improvement in the organization of distribution, planning building-

construction programs to insure regular employment throughout the year, better regulation of expenditures on public works, which could be secured by planning ahead for period of years, and the provision of facilities for research into business conditions, and in private business the introduction of measures such as the planning of purchases and sales, and production for stock and initiation of side lines which tend to regularize employment. Vocational guidance is of importance in meeting the problem of casual employment, as the ranks of unskilled laborers are recruited largely from young persons who in their early years of work received no industrial training.

Recommendations of the Commission

THE commission recommended as a result of the study that the functions of the bureau of census and statistics should be extended to include the construction of an unemployment index and an index of production and to provide for the collection of data on other matters which show variations in the activity of trade. It is also considered that the Government should establish facilities for continuous research into business conditions and the causes of the business cycle. It was further recommended that the Commonwealth and State Governments and civic authorities should adopt the policy of planning public works over a term of years, of regulating expenditures for this purpose within yearly periods, and of placing orders for materials in advance.

Other measures recommended were the institution of a more uniform system of employment bureaus in each State, development of vocational guidance, stabilization of exchange, and the establishment in each State of a representative committee to be known as the "industrial stability committee" to study the incidence of seasonal fluctuations and formulate plans for their correction, and that there should be cooperation on the part of all governmental agencies and the industrial stability committees in the establishment of a nation-wide policy of industrial stabilization.

A Study of Public Works and Unemployment, 1919 to 1925

A STUDY of the potential power of public works in averting cyclical unemployment has recently been made by F. G. Dickinson, of the University of Illinois. The results are published as a supplement to the September, 1928, issue of the Annals of the American Academy of Political and Social Science. The period under review is 1919-1925.

Among the various angles of the problem that are discussed by Doctor Dickinson are: (1) The annual expenditures for the different types of public construction; (2) the fluctuations in employment; (3) the portion of unemployment which would have been absorbed if public works had been perfectly distributed in the years of the most severe unemployment; (4) the effect of such distribution of public works upon construction costs and the cost of floating Government debts; (5) the practical and political impediments which would have to be overcome in the operation of this system of prevention, which he lists as follows:

The unreliability of business forecasting.

The difficulty of getting city officials to act quickly.

The appeal of public improvements as a campaign issue.

Municipal financing problems.

The effect of the sale of municipal bonds upon the supply of credit for private industry.

The difficulty of forecasting civic needs for improvements.

The tendency towards inefficiency in government construction.

Geographic and occupational shift of workmen.

Trade-union restrictions on membership in the building trades.

The above subjects are taken up separately at some length and in connection with certain topics tables and graphs are presented. The summary and conclusions of the report are given in part below:

As a preliminary to drawing conclusions, attention is called by the investigator to the peculiar features of the period (1919-1925). Not long after the armistice public officials again took up peace problems. Many plans for public improvements which had been on file during the war were brought out for revision and immediate application. In less than a year after the armistice cities were endeavoring to outstrip each other in volume of construction. This immense activity increased year after year until some people were alarmed at the enormous number of bonds on the market. It is obvious that the period was one of abnormal growth in governmental expenditures for public construction and it is, of course, necessary to be cautious in making deductions based upon these seven years. Parallel with this large increase in public work there was an enormous expansion in private industry. New establishments were set up, new industrial enterprises were launched, and prices soared rapidly. The peak of prosperity was reached early in 1920 and suddenly fell in the autumn of the same year. In the latter part of 1922, however, the upward climb of prices and employment began again.

Doctor Dickinson states that it is not his purpose "to generalize upon the possibilities of using public work to prevent cyclical unemployment for all time to come, but only with reference to the years 1919-1925." He emphasizes the limits of the usefulness of the study, but such caution, he feels, is preferable to dubious generalizations.

It is also pointed out, "as another inherent weakness," that only factory unemployment is referred to in this measurement of the possibilities of public works in the offsetting of industrial depressions. At the same time attention is drawn to the fact that the factory laborers' problem is outstanding not only because of the large numbers of persons involved but because of the irregularity of their work.

The above explanation should be given due weight in considering the following digest of Doctor Dickinson's conclusions:

1. The value of public construction contracts let during the 7-year period under review ran from \$674,000,000 in 1919 to \$1,283,000,000 in 1925. The increase was fairly even except for 1921, in which year there was no substantial growth.

2. The total amount of wages of factory employees varied greatly from year to year but the total of 1925 (\$10,409,000,000) was approximately one-half of 1 per cent less than the total for 1919.

3. If all of the public construction had been perfectly distributed during the seven years, the wages paid on such public construction

would have been sufficient to offset the wage losses of factory laborers. In brief, the employment index could have been maintained at 100 for each of the seven years.

4. If only 50 per cent of the public construction of any one year could have been shifted, the wages paid thereon would not have been sufficient to avert all the unemployment in 1921 and 1922, but a substantial percentage of the unemployed would have had work. In 1921 the index would have been forced up from 86 to 95 by the absorption of approximately 67 per cent of the unemployment of that year.

5. It is not easy to ascertain the net result of this shift of public construction from prosperous to depressed years. The period of most severe unemployment was the prelude to the months in which wages and prices of materials were lowest. Some of the transference of public works from one year to another would mean increased cost. "Taking the period as a unit, the saving in cost would be only 2 or 3 per cent at the most. This conclusion does not concur with the arguments advanced by champions of this economic reform who claim it would greatly reduce the cost of public construction."

6. The 2 or 3 per cent saving might have been completely obliterated by loss incurred in marketing bonds during depressed years when interest rates were not favorable to borrowers. Naturally, the improvements financed by current taxes would not be affected by these fluctuating interest rates. Moreover, it is likely that the selling price of municipal bonds would not have declined to such an extent if a large amount of public construction had been undertaken in 1921. There can be no very accurate estimate of the loss for the period as the bonds were marketed 6 to 9 months previous to the letting of the contracts. Indeed, the final conclusion on the cost problem "is neither favorable nor unfavorable." Doctor Dickinson holds that the efficacy of this proposal to shift public construction is not determinable by the issue of economy and extravagance in expending the taxpayers' money.

7. Somewhat different results are reached when the pay-roll index is substituted for the employment index. Although this substitute is of value it does not serve the purpose of the investigation so well, "because it is the product of two variables—employment and wage rates; the latter being a variable which this shifting of public construction would tend to eliminate."

8. The preceding conclusions must not be "considered apart from business psychology." An economic depression is in a measure the result of a "lack of confidence in business." It might develop that the letting of a very large number of construction contracts would tend to reestablish confidence and regularize industry. Such a stimulus would increase the possibilities of the scheme under discussion by still further stabilizing production.

9. Apparently, geographic labor mobility would have been unnecessary, as public construction was not restricted to any one part of the country, the distribution corresponding roughly to the population. An overemphasis seems to have been given to occupational mobility as an impediment to the scheme, for a relatively small proportion of the construction price goes to local laborers actually on the job.

10. To put such a construction program into effect trade-union cooperation must be secured. The introduction of new workers into the construction trades would have to be allowed even if such workers were only given temporary union membership. The determination of the number of new workers would depend largely upon the occupational mobility referred to above.

11. The whole proposal constitutes "a challenge to the agents of social control." It is acknowledged that vigorous initiative on the part of the United States Government would be necessary for the operation of this scheme. Even with such impetus it would be no easy task to hold transitory local governments in line with the Federal program. While it is not the purpose of Doctor Dickinson's thesis to present the framework of a complete scheme he ventures to suggest certain lines that could be followed, namely:

The Government might refuse aid to hard roads built in highly prosperous years. In making educational grants to high schools, aid might be withheld from communities which had built their schools in years in which unemployment was negligible. Arrangements for sinking funds would not be advisable. Restrictions on indebtedness to which cities are now subject would have to be eliminated or made less drastic. When employment declined a specified per cent below the average of a period of years, action would be taken to expand construction work. Such a fixed per cent would undoubtedly not be altogether satisfactory but some rigidity is required for the functioning of social control. Municipal authorities would be obliged to do a good deal of advance budgeting of needed construction in order to be in a position to act promptly upon advice from Washington.

Doctor Dickinson repeats that it is not the purpose of his study "to advocate this economic reform but merely to show its possibilities and limitations." The shifting of employment from prosperous to lean years is considered. Such procedure might be described as "robbing Peter to pay Paul." He points out, however, that it is quite widely accepted that the progress of industry would be accelerated and life made more enjoyable if the peaks of prosperity and business slumps were not so pronounced. He also suggests that possibly in his study too arduous an attempt was made "to secure objectivity," the result being a disclosure of the shortcomings of the statistical method in this particular field.

In the final paragraph of his report Doctor Dickinson, by way of emphasis, reiterates his findings, namely:

That the amount of public construction was of sufficient volume to avert the major part of factory unemployment if such construction had been properly shifted; that the suggested allocation of construction would not have substantially affected construction costs for the period as a whole; and that the political handicaps of the scheme are formidable but may be overcome if a progressive public "wholeheartedly desires" to solve in part the problem of unemployment.

INDUSTRIAL RELATIONS AND LABOR CONDITIONS

Southern Labor Problems as Presented in the American Federationist

AS A prologue to the holding of the 1928 convention of the American Federation of Labor in New Orleans, the November issue of the American Federationist is almost entirely devoted to a symposium on industrial and labor problems of the South. A digest of some of the contributed articles is given below:

Industrialization of the South

ACCORDING to Clarence E. Bonnett, of Tulane University, modern industrialism in the Southern States has drawn its labor supply almost wholly from native sources, and the labor drift has been principally from the farms to the mill towns, lumber camps, coal mines, or factories. The reserve army of native labor, he thinks, has without a doubt been a significant factor in holding wages at a low level in the Southern States.

The returns to landowning farmers have quite generally been low in recent years, with only occasionally a profitable year in favored localities. The tenant farmer has rarely been above the poverty line. Accordingly, any enterprise that offered wages much above the generally meager earnings of the farm could easily obtain an adequate supply of labor. Of course, the cost of living is lower in the South than in the North, simply because fewer things are required, for, while food is cheaper as a rule, there are other necessities that, quality for quality, are higher, especially clothing in a commissary-controlled mill town. Lest, however, the mill-town factors be overestimated, we may note that wages are relatively low among clerical workers on the railroads of the South, and that these workers are quite generally organized.

Modern southern industrialism has been an influence in the evolution of specialized forms of agriculture and in bringing the mill town to its high degree of development. With the new industrial development has come the northern employer. Nearly all of the old textile mills were owned by southerners, but in recent years there has been an extensive migration of northern capital and management into the South.

Thus northern capital and management are producing vital changes and raising new problems in the South in various industries. While the new management has had recourse to the most modern machines and the most up-to-date factories and institutes, welfare work, bonus schemes, and employees' stock ownership, such management has adopted with slight modification old southern methods of averting labor troubles.

The great changes made and being made call, however, for new adjustments throughout the entire complicated situation. The problem is there, although temporarily it may be buried under a mass of various devices. How will the situation be met when the surplus of labor dissipates itself by negro migration to the North, or is absorbed by industrial expansion, or is depleted by both means?

Changing Attitude of Southern Workers

THE negro must be considered in evaluating present labor problems in the Southern States, Dr. Thomas E. Jones, of Fisk University, points out. In certain trades negroes get steady employment, but they constitute "a labor surplus available for rush periods, and the maintenance of production in industrial disputes." Moreover, their "agrarian habits, low wages, and high death rates reflect an industrial situation involving both white and colored workers."

These problems, however, seem to be disappearing before the educational progress of the South, which has run parallel with its industrial prosperity. The expansion of educational facilities, the common use of the automobile, the multiplication of radios and the growing popularity of the vitaphone are sweeping away provincial barriers. As education and experience increase the southern workers' skill, they will demand the same privileges and comforts as are obtainable in other sections of the country.

Are Southern Cotton-Mill Villages Feudalistic?

UNDER this title Mercer G. Evans, of Emory University, discusses the charge that a feudal system exists among southern cotton-mill workers and sets forth some tentative conclusions on this matter, some of which are given below. The cotton-mill village child, he thinks, has little opportunity to learn about trades in the outside world; when the child grows up, "there is no escape from the industry. The only trade he knows, the only society he can mingle with, his only world, is in the cotton-mill village." It is pointed out that the employer has arranged that no unions have been organized to furnish the worker with funds while he seeks to change his contract terms. "Theoretically he is a free individual. Actually, he is quite unfree." Paternalistic welfare work is on the increase. While much of this work, the author declares, is worthy of praise, "it is not so certain that all of these things should be planned in an employer's office and should be completely supervised by the employer's representatives. Such is not the principle of democracy. Such will not tend to develop initiative and a sense of responsibility—characteristics of a democracy." It is conceded that "the fault is probably not directly that of the employers. Poverty, ignorance, lack of initiative, and a despair of improvement are probably the direct factors." The same article states that an investigation of efforts to unionize workers in the South "indicates a complete hostility on the part of employers to any such organization." Furthermore, there is some evidence which tends to show "that few mill-village employees do exercise their electoral privileges."

Labor Progress in North Carolina

"WHAT price 100 per cent Americanism" is discussed by the president of the North Carolina State Federation of Labor, who reports that the 100 per cent American workers in his State are being paid European wages while foreign-born workers in the North, East, and West are being paid American wages. There was, how-

ever, during the past year a 30 per cent increase in the membership of the State federation of labor, and under the auspices of this organization an interstate labor conference was recently held in North Carolina. The Southern Summer School for Women Workers was in session six weeks in 1928 at Burnsville, N. C., and a conference is to be held this fall at Chattanooga for the discussion of certain labor problems by a representative from each of the southern State federations of labor.

Tennessee Federation of Labor

THE Tennessee Federation of Labor was organized in 1896 and has been striving for years to have protective labor legislation enacted, according to the secretary of the federation making the report. He holds that the Tennessee labor laws are among the best in the South.

Organization of Georgia Workers

IN 1926 Georgia passed from the agricultural to the industrial column of States, and the State federation of labor and its affiliated bodies began fully to realize the deplorable condition facing the workers in this section of the country. A decision was reached to launch a widespread educational campaign in regard to the principles, policies, and accomplishments of trade-unionism. At the same time the State federation proposed a program of protective social legislation.

In coordination with the educational and legislative campaign was launched an organization program amongst the workers. The Georgia Federation of Labor put paid organizers in the field for a short period of time, this activity being terminated because of insufficient finances to carry the work on, but the educational and organization work has been continued by voluntary workers; during the campaign, financed by the State federation of labor, the labor movement in the city of Savannah was completely reorganized. On April 1 at the urgent request of the State federation of labor the American Federation of Labor took over the campaign among the workers of this section, and with the cooperation of some financial assistance of the reorganized movement in the city of Savannah, this campaign has been continued.

A 20 per cent increase in the number of local unions is reported as one of the results of the organization drive. Furthermore, lethargic local unions have been aroused and their membership substantially strengthened. The prospects for reorganizing the central bodies are reported as encouraging. In brief, the unionized workers in Georgia "have definitely adopted a new spirit towards the problem of organization." The campaign to enlighten the public and business interests in the purposes and achievements of organized labor "has put the labor movement upon a higher plane in this section."

Florida State Federation of Labor

IN 1901 several unaffiliated union crafts assembled at Tampa and organized the Florida State Federation of Labor. In 1926 the organized membership at large reached the peak—35,000. In the winter of that year practically every building-trade craft was unionized. Trade-unionists everywhere in Florida prospered. The movement made a great deal of headway but received a tremendous setback through the collapse of the real estate boom in 1926, which was intensified by the financial depression. Trade-union membership suffered enormous losses and wage scales dropped at least 10 per cent.

Trade-Union Cooperation in Mississippi

A NEW spirit of cooperation between labor representatives and business men of Mississippi is reported by the president of the federation of labor of that State. This official refers briefly to some of the activities of organized labor in Mississippi; for example, the sponsoring of the recently enacted compulsory education law, the encouragement of adult trade-union members to avail themselves of night schools, and cooperation with the Mississippi State Board of Development in advertising the advantages of the State from a manufacturing standpoint.

The Mississippi State Federation of Labor does not belong to that school of thought that believes all corporations to be bad, and in fact we teach our members that corporations generally are valuable assets to a State, and are only bad when their management is bad, even as in some of our own labor unions. We realize that a corporation is legal, that it makes possible employment where perhaps one individual could not, and that it insures a continuity of employment.

Need of Closer Knit Labor Organization in Louisiana

IN THE judgment of the president of the Federation of Labor of Louisiana, the first highly important step to be taken for the advancement of the labor movement in that State would be for all internationals specifically to instruct all their locals to affiliate with the State and central bodies. Attention is also called by this official to the following crafts of Louisiana, which are greatly in need of organization: Laundry workers, retail clerks, machinists, meat cutters, bakers, oil field and refinery workers, hotel and restaurant employees, laundry drivers, paper makers, teamsters, and chauffeurs.

Recent Expansion of Trade-Unionism in Texas

AS ILLUSTRATING the recent forward movement of organized labor in Texas the executive secretary of the State federation calls attention to the fact that two years ago only one local union existed in the so-called Rio Grande Valley while at the date of his report there were 17 such unions. Moreover, in the past year central labor unions have been established or reestablished in the following four cities: Corpus Christi, with 15 local unions; Marshall, with 15 local unions; Pampa, with 10 local unions; and Tyler, with 7 local unions.

Considerable progress has been made by the labor movement in Big Spring, Borger, Midland, and Odessa, although central bodies have not yet been set up in these towns.

Other Subjects Discussed in Symposium

AMONG other subjects discussed in the symposium were: Southern industry and the southern mountaineer; Piedmont Organizing Council and the Virginia-Carolinas Typographical Conference; The merchant and his wage-earning customers in the South and in the North; Organizing bakers in New Orleans; The activities of long-shoremen's locals at Norfolk; and Workers' education in the South.¹

¹ See section of this issue on Workers' education.

Chinese and Japanese in Pacific Coast States

A RECENT study entitled "Resident Orientals on the American Pacific Coast," by Eliot Grinnell Mears, embodies not only the results of extensive research in Federal and State documents and various other authoritative (published and unpublished) sources but information secured from wide correspondence special questionnaires, and direct personal inquiry in 10 far western States. The author is a professor of geography and international trade at Stanford University.

The following data are taken from the author's résumé:

The United States is looked upon as a democratic nation extending to aliens the protection of the Federal Constitution "which establishes treaties as 'the supreme law of the land,' and provides that no State shall 'deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.'" In the United States, however, Professor Mears considers, there is a lax attitude toward public authority. As far as possible American citizens work out the conditions relative to their personal welfare either through or despite public authority. To Californians the problems concerning the Chinese and, later, the Japanese focused on new racial difficulties. The Californians' viewpoint is now embodied in State and Federal laws. Undoubtedly sectional antagonism has outweighed "considerations of international amity." Notwithstanding, however, the discriminatory legislation since 1918, very few Asiatics have left California for other States.

Treatment Under the Law

FROM the legal point of view the discriminations to which orientals in the United States hold they are subjected, when carefully analyzed "will be found to be based on solid precedent and on enactments which, in the main, antedate oriental immigration."

With the exception of citizenship, marriage, and land ownership restrictions, the legal disabilities of oriental aliens in the Pacific Coast States are not so many as it is sometimes supposed, being limited practically to exclusion from public employment, from hunting and fishing privileges and from carrying weapons, and to certain limitations as to licenses. These latter discriminations cover all aliens—Asiatic or non-Asiatic.

In the past century in the United States there has been a general trend toward the liberalization of laws relative to the rights of aliens. "Aiding" statutes have outnumbered "restricting" laws so that the alien's status, compared with what it was under the common law alone, has improved.

The citizenship status is wholly a Federal matter. Legislation prohibiting intermarriage with orientals exists in Oregon and California. The alien land laws of these two States and of Washington constitute the principal legal restrictions to orientals who are not accorded certain rights granted to immigrants eligible for citizenship. "It should be borne in mind, however, that the enactment of these laws was due, not to blind race prejudice, but to the strong desire on the part of the advocates to improve the rural community." The classification upon which these laws are based was established by

Federal statutes years before there was an oriental problem, and its application to ineligibles for citizenship, according to the United States Supreme Court, includes not only Chinese and Japanese but also native Hawaiians, Burmans, Canadian Indians, and Hindus.

An analysis of recent Pacific coast legislation clearly indicates that the present treaties with Asiatic Governments are not violated by the alien land laws. Undeniably, however, these States formulated laws directed at resident Asiatics. It is noteworthy that only one provision of the alien land law of California has been declared unconstitutional.

It seems evident that the State courts are as willing to protect aliens' rights as the United States Supreme Court and "have been and are above reproach in their handling of all alien problems arising from various laws and coming before them for decision." No doubt Asiatics have had numerous just reasons for complaint, "but the inference that there may be a prejudiced judiciary on the West Coast is not borne out by legal history."

Opportunities for Employment

THE first generation of Asiatics has no problem so far as getting jobs is concerned. The Chinese are employed in private homes, chop suey houses, oriental shops, and Chinatown establishments. The greater number of the Japanese are doing agricultural work, although many are found in private homes, lodging houses, hotels, restaurants, and produce and grocery stores. Almost all of the Chinese are in noncompetitive lines, but some of the Japanese are abandoning the farms, where their ability is commonly recognized, to compete in city business. The greater number of both Chinese and Japanese are past middle life. They are able to secure "adequate remuneration" and are not often without employment.

The Chinese of the second generation apparently "cling to Chinatown," where the possibilities of employment are dwindling because of the shrinkage in the area and activities of these settlements. Comparatively few are interested in jobs outside of their colony. Japanese of the second generation, however, are eager to get positions of promise and desire to get away from agriculture; but these aspirations prove a handicap, as employers prefer their own race, and up to the present only a comparatively small number of the older generation have deserted agriculture for important business positions.

The American-born of Asiatic parentage faces a very grave vocational problem, as numerous employers assume that, even though they have no race prejudice themselves, the placing of orientals on their pay rolls would arouse criticism.

Contacts Between Americans and Orientals

THERE are few opportunities for personal contact between white Americans and Asiatics. In view of the race feeling, however, the little objection to interracial relations in public and semipublic matters is surprising.

It must be acknowledged that certain racial antagonisms do exist on the Pacific coast that are more marked than in other parts of continental United States, but Professor Mears thinks it is absurd "to compare the position of the American Chinese or Japanese with

that of the American negro." Furthermore, in the Pacific Coast States there have been more opportunities afforded for contacts between orientals and natives than would have been offered under similar conditions in the South.

Improved Relations

WHILE the American Legion posts, the Native Sons, and the labor federations have not shifted their well-known position in regard to aliens, and the California Joint Immigration Commission still functions,¹ there are China societies, Japan societies, chambers of commerce, church groups, etc., which are extremely friendly to orientals. Furthermore, letters from scores of individuals and organizations of various types, as well as personal interviews with informed persons in 10 western States, have all tended to convince Professor Mears that in general there is now a more friendly attitude toward both the Japanese and the Chinese than in the recent past.

In further proof of this, the obvious decline in the attempt to enforce the land laws is cited. Many outstanding citizens feel, Professor Mears reports, that there is no longer any need for this legislation. Among the reasons given by the author for this more friendly feeling are (1) the heavy immigration of Filipinos and Mexicans with whom the Japanese and Chinese "are very favorably compared"; (2) the Japanese Government's relatively recent action in regard to "picture brides," to domestic land legislation, and to the right of expatriation; and (3) the growing attention and interest in the exports of products from the Pacific coast, especially lumber, flour, rice, dried fruits, and canned goods, which find important oriental markets.

The Pacific coast still remembers the rapid additions to the Chinese local population prior to 1882 and to the Japanese population up to a recent date. It is, however, not unreasonable to anticipate that "as soon as there is a general feeling of security against further oriental immigration, there will be certain modifications of existing laws, more in concord with international good will."

Survey of the Use of Machinery in Coal Mining

FOR some time the American Mining Congress has been conducting a survey of mechanization in bituminous and anthracite coal mines of the United States and has published regularly in its official organ, The Mining Congress Journal, reports on various mechanized mining operations. As an outgrowth of this work, the congress has appointed a national committee on mechanized mining "to promote efficiency, economy, and safety in the production of coal."²

The survey showed that the successful operation of loading equipment has reached such proportions that it is of vital interest to every coal operator to keep in close touch with the movement, whether or not his mine is now being worked by machinery. The new committee will keep the industry supplied with current information concerning

¹ On June 13, 1927, an announcement was made that "this committee follows an established policy of assisting in securing for alien immigrants, ineligible for citizenship, every right and courtesy due them under treaty, or otherwise, while at the same time it insists on a rigid observance of national policy and law as to immigration."

² The Mining Congress Journal, Washington, November, 1928.

the developments in mechanization in every coal-producing field in the United States.

The American Mining Congress outlines as follows the benefits which it believes will accrue to the industry, to the public, and to the miner from the work of this committee:

It is believed that the adoption of machine methods as will be developed by this study, which has been outlined to cover a period of five years, will result in great benefits to the coal-mining industry. For the public it will mean cleaner and more economical coal; for the miner, safer working conditions through better supervised, better ventilated, concentrated working places. It further offers to the miner an opportunity to materially raise his economic status because of the numerous specialized tasks incidental to the mechanical mining of coal. For the operator, it will mean more continuous and more profitable recovery of his coal. For the manufacturer of mining equipment, it offers a great opportunity to serve the industry and assist it in arriving at that efficiency and prosperity for which it is striving.

Abolishing a Definite Age Limit in Employment

AN INTERESTING attempt is being made in Pennsylvania to induce employers to agree to lift the age limit in the employment of workers. The campaign is being conducted by the bureau of employment of the Pennsylvania Department of Labor and Industry, which has secured the registration of about 2,000 firms that will not bar men from employment on account of age when they are "physically and mentally able to meet the requirements of the positions for which their services may be required." The bureau states that many of these firms have never had an age limit, while others "have lifted the age ban since the installation by the bureau of employment of a survey letter to the business men of Pennsylvania." The following representative companies in different industries are among those registered:¹

- American Steel Foundries.
- Carnegie Steel Co.
- Duplan Silk Corporation.
- H. C. Frick Coke Co.
- General Baking Co.
- H. J. Heinz Co. (baked beans, pickles, etc.).
- Jones & Laughlin Steel Corporation.
- Lackawanna Mills (knit underwear).
- Lehigh Coal & Navigation Co.
- Lit Bros. (department store).
- Magee Carpet Co.
- H. R. Mal'inson & Co. (Inc.) (silk).
- National Radiator Corporation.
- Republic Iron & Steel Co.
- Schwarzenbach Huber Co. (silk).
- United States Radiator Corporation.
- S. S. White Dental Manufacturing Co.

In its Monthly Survey Letter for November 1, 1928, the bureau of employment reports that each day the names of additional employers are being received from all parts of Pennsylvania, giving assurance that they "will not bar men from employment on account of age but will hire men solely upon the basis of physical and mental fitness."

¹ Pennsylvania. Department of Labor and Industry. Bureau of Employment. Pennsylvania industries and corporations having no age limit. Harrisburg, 1928. 29 pp.

WOMEN IN INDUSTRY

Industrial Night Work of Women

A STUDY of the employment of women at night and its regulation by law in the United States and foreign countries, with testimony on the medical, social, and economic effects of night work, has recently been published by the United States Women's Bureau as Bulletin No. 64.

The evil effects of night work for women have long been recognized, but the development of legislation prohibiting it has been gradual. At the close of 1927, 36 foreign countries had abolished night work for women in industry or had taken steps looking toward its prohibition. Only 16 States of the United States have any legislation prohibiting it, and the report states that in these the laws are "far from complete or effective." In two additional States the employment of women at night is limited in daily or weekly hours. In some of the prohibiting States only minor occupations are covered and in others the legislation applies to manufacturing only. Thus, "a large percentage of woman workers in the 16 States having night-work laws, as well as all the women in industry in the remaining two-thirds of the United States, do not come under night-work prohibition."

Prevalence of Night Work

FEW statistics on night work are available, but in a series of industrial studies made by the Women's Bureau from 1919 to 1925 certain data on the subject were collected. Although the figures were not at all comprehensive, since night work was not the subject of the inquiry, the groups studied were considered large enough to have representative value, and "in all cases large enough to have suggestive significance. One fact is certain—that these findings greatly minimize the extent and the proportions of night work," which was found to vary widely from plant to plant and from week to week.

The surveys covered 2,464 establishments, with 208,034 employees, in the following localities: Alabama, Georgia, Chicago (candy), Illinois, Iowa, Kentucky, Mississippi, New Jersey, Ohio, Oklahoma, South Carolina, Tennessee, and Virginia. Of these establishments, 131 had 4,367 women working at night. Nearly two-fifths of this number were employed in the textile industry and 87 per cent of these were located in the five southern States for which data were collected—Alabama, Mississippi, South Carolina, Tennessee, and Georgia. The next largest groups of woman night workers were the 700 found in the tobacco factories of Virginia and the 996 in the electrical shops of Illinois. However, of the total number of women surveyed the proportion employed at night reached 5 per cent in only two States—Alabama (5 per cent) and Mississippi (6.4 per cent).

Of the 4,367 woman night workers, 3,260 were working 10 hours or more a night and 996 at least 11 hours. Only 438, or 10 per cent, had a schedule as short as 8 hours. A 12-hour night shift was in effect for 6 per cent of these workers. As regards weekly hours, 1,912 worked 50 hours, the next largest group (603) worked 55 hours, and the third largest (562) between 50 and 55 hours, but less than 55.

Attention is called to the fact that during the period covered by the surveys industrial depressions occurred. "Short time was prevalent then, overtime for the most part was negligible, and it seemed that the resort to night shifts was nowhere demanded by any pressure of business."

The status of the employment of women at night in the United States as indicated by the incidental findings of these surveys is summed up as follows in the report:

Even in a season of industrial depression, night shifts are kept running and women are employed to supply them. They involve no large percentage, though they constitute considerable absolute numbers of women in industry, rising as high as 500, 700, or even 1,400 in some of the States in the limited groups studied.

The night shifts are largely composed of women in the prime of life; of married women; of native Americans in the South and of a preponderance of foreign-born women in States receiving a large proportion of immigrants; and, lastly, of white women.

While the wage rates of night workers are slightly higher than those of day workers, their earnings show a tendency to fall below the corresponding earnings of the day shift.

Finally, the essential strain and hardship of night work is needlessly intensified through lack of any thought or effort to economize the workers' strength, as, for example, by lack of provision for proper intervals or rest pauses, by failure to provide seats, or by occasional undue use of overtime.

International Action on Night Work

THE long fight in Europe for the abolition of night work for women culminated in the Bern convention of 1906, which was accepted by the representatives of 14 European powers who had gathered at Bern in September, 1906, at the invitation of the Swiss Federal Council, to initiate the international protection of labor by the suppression of night work of women. This convention forbade the employment of women at night regardless of age and required that a minimum of 11 hours, including the interval from 10 p. m. to 5 a. m., should be allowed for the night's rest. It applied to all industrial undertakings employing more than 10 workers, except such as employed only members of the proprietor's family. Exceptions were allowed in cases of interruption of work due to causes beyond the proprietor's control or to save loss of materials.

The convention required the signatory countries to file their ratifications with the Swiss Federal Council by December, 1908, and also to insure fulfillment of the terms of the agreement by harmonizing existing legislation with the provisions of the convention. Extensions of the time limit for ratification of the convention were granted so that all of the signatory countries had not ratified until January 14, 1912, on which date the convention came into force.

Nonsignatory countries also were influenced by the Bern convention and approached or exceeded its requirements. However, with

the outbreak of the war, overtime, Sunday, and night work were again resorted to, but eventually the need for conserving labor power became imperative. The Women's Bureau comments as follows on the effects of the suspension of protective regulations and on the restoration of normal standards:

The history of the later years of the war is the history of the gradual withdrawal of war-time exemptions, the gradual restoration of the provisions of the labor laws. Overtime was found to defeat itself, overstrain to invoke diminishing returns. When the machines had been speeded to capacity, the workers straining to their limit, production had fallen. In the very interest of efficiency and in alarm at their failure to maintain output, the warring countries were forced to call a halt. One by one, under the imperative need of conserving labor power, the nations began to restore normal standards. This slow return to peace-time standards under increasing pressure of war was a striking demonstration of the value of the labor law, an ultimate proof of the wisdom—the national necessity—of safeguarding the health of the workers in war emergency as in peace.

Slowly and step by step the Sunday rest was restored, overtime was cut off, working hours were reduced to a normal or nearly normal day. The night-work exemption lingered behind the others, since night shifts offered the obvious means to hard-pressed Governments of keeping the machines running without the exhaustion of the labor force entailed by overtime or inhumanly long hours. Yet the authorization of women's night work was progressively limited; the prohibition was restored for girls and young women under 16, under 18, under 21, and at last for pregnant women and nursing mothers. Had the war lasted longer, it is scarcely venturesome to assert that it would have seen the prohibition of night work for women reestablished with the other protective restrictions of the labor laws.

At the International Labor Conference at Washington in 1919 a new convention was formulated to bring up to date the Bern convention and "extend its application in accordance with the needs and opinions of the time." The principal change was the prohibition of night work in all public and private industrial undertakings irrespective of number of employees. It was provided that this new convention should become effective as soon as two ratifications had been registered and it accordingly came into force on June 21, 1921. Thereafter, in each ratifying country it was to come into force on the date ratification was registered.

INDUSTRIAL ACCIDENTS

Fatalities in the California Petroleum Industry, 1927

A REPORT reviewing briefly the fatalities occurring in the California petroleum industry during 1927 and offering suggestions for preventive measures has been issued by the United States Bureau of Mines (R. I. No. 2881). A reduction of 24 per cent is noted for the industry, there being 41 fatal accidents in 1927 as compared with 54 in 1926. No reduction is recorded in the drilling and producing division, admittedly a comparatively hazardous portion of the industry. However, it is explained that the failure to show betterment is because the division carried a number of accidents not typical of oil-field work. For example, three men were killed in automobile accidents on the highway and one received fatal injuries while on a "courtesy" job of raising a new flagpole on a school ground.

Corresponding with a noticeable decrease in the monthly average number of drilling wells during 1927 as compared with 1926, there was a marked reduction in the number of fatal injuries at drilling wells; only five deaths occurred during 1927. Based on a monthly average of 404 wells being drilled, the average number of wells drilled per fatality was 80.8. The average number in 1926 was 36.8. The report suggests that "this reduction of lives lost in a hazardous occupation is a reward of the work of the California Industrial Commission, the various company managements, and the men employed for their activities in the behalf of safety."

In the producing department, the monthly average of producing wells dropped from 11,288 in 1926 to 11,276 in 1927. Despite this decrease, a slight increase in fatalities was shown, as there were eight in 1927 and six in 1926.

The following table presents a five-year comparison of fatalities in the drilling and producing fields of California, showing the amount of oil produced each year and the corresponding fatality index expressed in fatalities per hundred million barrels lifted.

NUMBER OF FATALITIES AND FATALITY RATES IN DRILLING AND PRODUCING FIELDS, BY YEAR, 1923 TO 1927

| Year | Number killed | Barrels of oil produced | Fatalities per hundred million barrels |
|---------|---------------|-------------------------|--|
| 1923 | 59 | 263, 728, 895 | 22.3 |
| 1924 | 44 | 230, 063, 117 | 19.1 |
| 1925 | 31 | 230, 147, 342 | 13.5 |
| 1926 | 26 | 224, 117, 013 | 11.5 |
| 1927 | 26 | 230, 751, 463 | 11.2 |
| Average | 37 | 235, 761, 566 | 15.7 |

It perhaps should be noted that in only two instances in the drilling and producing division were fatalities caused by failure to provide safety devices required in the general petroleum safety orders for drilling and production, issued by the industrial commission of the State.

Much of the report is given over to a detailed explanation of the causes of the fatal accidents, showing, for example, that falling objects account for more than any other single cause, the percentage in the drilling and production division alone being 38.5. Falls of persons were second in importance, suggesting the need of additional precaution and care in working around wells.

Industrial Accidents in New Jersey in 1927

THE Industrial Bulletin, issued by the New Jersey Department of Labor, for September, 1928, contains a summary of the number of accident cases that were closed during 1927, together with the amount of compensation paid. There were 234 fatal, 11 permanent total disability, and 25,620 nonfatal awards made. The total compensation paid in 25,865 claims was \$5,958,754, of which amount \$1,381,605, or 23.2 per cent, was for the death and permanent total disability claims. The 6,387 claims for permanent partial disability received \$3,477,797, and the 19,233 cases of temporary disability were awarded \$1,099,352. The largest total compensation paid, \$2,603,408 (43.7 per cent), and the largest number of accidents, 12,479 (48.2 per cent), were in the manufacturing industries, with construction, including shipbuilding, second, numbering 5,250 accidents (20.3 per cent) and \$1,599,958 in amount of awards (26.9 per cent). Considered by cause, "objects and tools being handled" was first in number, with 8,866 cases (34.3 per cent), but third in compensation paid, the amount being \$1,178,704 (19.8 per cent). Machinery as a cause was first in compensation paid, \$1,316,583 (22.1 per cent), but third in number of claims settled, with 3,886 (15 per cent). Claims involving falls of persons were second in number with 4,379 (16.9 per cent) and received the second largest amount of compensation, the sum being \$1,230,983 (20.7 per cent). Of the total non-fatal claims settled, 6,158 (24.0 per cent) were for cuts, 5,300 (20.7 per cent) bruises, and 4,462 (17.4 per cent) fractures. There were 15 cases of asphyxiation. The total medical cost in 10,708 cases was \$591,569, or an average of \$55.25 each.

Cases involving occupational diseases numbered 96 and the compensation paid in these cases was \$38,426, or about six-tenths of 1 per cent of the total paid for all claims. Three such cases resulted in death, and in other cases there was a total of 13,723 days lost, or an average of 148 each.

Causes of Serious Accidents in New York State

AN ANALYSIS of the causes of industrial accidents is essential to the proper application of a safety program. While the number of accidents is available in most States, very few attempt to collect and publish figures which will enable the safety man to determine just where and why accidents are occurring in his plant. New York is one State which tabulates accidents by cause classification,

and the figures for the fiscal year ending June 30, 1928, have just been made available in its Industrial Bulletin for September. Only the most serious accidents are included—that is, those causing death and permanent disability (either total or partial). The number of these cases and the compensation awarded is disclosed in the following table:

NUMBER AND COST OF COMPENSATED FATAL AND PERMANENT ACCIDENTS IN NEW YORK STATE, YEAR ENDING JUNE 30, 1928, BY CAUSE

| Cause | Death | | Permanent total disability | | Permanent partial disability | | |
|---|-----------------|------------------------|----------------------------|------------------------|------------------------------|-----------------|------------------|
| | Number of cases | Awards (present value) | Number of cases | Awards (present value) | Number of cases | Number of weeks | |
| | | | | | | Total | Average per case |
| Animals | | | | | 104 | 6, 872 | 66 |
| Explosions, electricity, heat, etc. | 112 | \$769, 820 | 5 | \$91, 552 | 327 | 20, 642 | 63 |
| Falling objects | 89 | 570, 237 | 4 | 55, 355 | 1, 098 | 33, 996 | 31 |
| Falls | 277 | 1, 734, 907 | 12 | 151, 294 | 2, 681 | 161, 792 | 60 |
| Handling objects | 99 | 709, 795 | 9 | 110, 882 | 3, 953 | 114, 322 | 29 |
| Hand tools | 15 | 116, 325 | 1 | 19, 086 | 1, 516 | 60, 667 | 40 |
| Harmful substances | 31 | 218, 278 | 3 | 44, 364 | 104 | 7, 934 | 76 |
| Hoisting and conveying apparatus | 133 | 876, 847 | 4 | 67, 051 | 885 | 45, 725 | 52 |
| Machinery | 50 | 325, 899 | 4 | 78, 695 | 3, 879 | 175, 172 | 45 |
| Stepping on or striking against objects | 21 | 146, 457 | 3 | 43, 097 | 314 | 12, 661 | 40 |
| Vehicles | 244 | 1, 529, 141 | 3 | 40, 846 | 1, 652 | 83, 653 | 51 |
| Other and indefinite | 58 | 339, 935 | 4 | 62, 269 | 508 | 22, 996 | 45 |
| Total | 1, 129 | 7, 337, 641 | 52 | 764, 491 | 17, 021 | 746, 422 | 44 |

It will be noted that almost 60 per cent of the deaths were due to falls, vehicles, and to hoisting and conveying devices, with falls as the leading cause. The average compensation paid per case, however, is not so great as that paid to those injured by hand tools, which class of accidents was responsible for the lowest number of accidents and the lowest total compensation cost. This is explained by the influencing factors of wages paid and the number of dependents, the former being somewhat lower among those killed by falls than among those killed by hand tools.

The report states that a greater number of the 52 cases of permanent total disability suffered from paralysis and the loss of the use of eyes than from any other form of injury; the number, however, is not given. Here again falls head the list, while the three leading causes—falls, handling objects, and explosions, etc.,—were responsible for 50 per cent of the total number thus injured and for about 46 per cent of the total compensation paid for permanent total disability. The rather high average cost per case of the total disability cases, amounting to \$14,702, is explained as being due to the fact that the injured workers are paid two-thirds of their wages or not more than \$25 a week for the remainder of their lives, whereas in fatal cases the widow receives only 30 per cent of her deceased husband's wages until her death or remarriage and each child receives only 10 per cent until it is 18 years of age.

Passing to the permanent partial disability cases, a total of 17,021 is recorded, with average compensation payments amounting to \$775. Here "handling objects" as a cause moves into first place with 23 per cent of the total number; while machinery takes the lead in total amount of compensation paid. However, the relative importance of these causes is not measured entirely by the amount of compensation

paid or the number of accidents recorded. The time loss must be considered. The number of weeks of time loss per case varied from 76 for harmful substances to 29 for handling objects, and yet, it is pointed out, in spite of this large charge in weeks against harmful substances, this cause cost in money almost the least, being \$149,215, due to the fact that the number of cases, 104, was comparatively low. That almost three-fourths of the injuries caused by harmful substances were to the eyes accounts for the high average number of weeks of compensation awarded in that cause group.

Infection Resulting from Industrial Accidents in New York State

A DECREASE of 5.5 per cent in the total number of compensated cases closed in the year ending June 30, 1928, as compared with 1927, and an 8.3 per cent drop in the total number of infected cases closed, are reported by the New York State Industrial Commissioner in the Industrial Bulletin for October, 1928. That infections greatly increase the cost and seriousness of slight injuries is readily shown by the fact, exhibited in the report in tabular form, that for one type of accident only, namely, handling sharp and rough objects, the average cost of compensated accidents where infection set in was \$204 while the average cost of the same type of accident where no infection entered was \$86.

By far the greater number of infected cases resulted from handling objects, there being a total of 5,681 (46.6 per cent) in 1928 and 5,867 (44.1 per cent) in 1927. All infected cases represented, in 1928, 13 per cent, and in 1927, 13.4 per cent, of the total cases closed.

Approximately 9.5 per cent of all eye cases compensated were infected cases, and about 2.2 per cent of all infected cases involved the eyes. In 1927 the corresponding percentages were 11.6 and 2.5, respectively.

Of machines causing infected injuries sewing machines have been most numerous in both 1927 and 1928, according to the report. The actual number, however, decreased from 321 to 268.

Since hands and fingers are the chief sufferers from infection, 27.7 per cent of all cases involving these parts being infected, it is interesting to note the details of the causes operating to produce this condition, as exhibited in the following table:

INFECTIONS OF HANDS AND FINGERS, BY CHIEF CAUSES, 1927 AND 1928

| Cause | Cases closed in year ending June 30, 1928 | | | Cases closed in 1926-27 | |
|---|---|----------------|----------|-------------------------|----------------------------|
| | All cases | Infected cases | | All cases | Per cent of cases infected |
| | | Number | Per cent | | |
| Sewing machines..... | 794 | 264 | 33.2 | 530 | 35.8 |
| Striking against objects..... | 1,117 | 617 | 55.2 | 500 | 58.1 |
| Handling sharp and rough objects..... | 5,811 | 3,933 | 67.7 | 1,878 | 70.2 |
| Continued wear from handling, friction, burns, blisters, etc..... | 322 | 298 | 92.5 | 24 | 92.1 |
| Hand tools in hands of injured worker..... | 3,959 | 1,226 | 31.0 | 2,733 | 32.8 |
| Explosions, electricity, heat, etc..... | 1,346 | 173 | 12.9 | 1,173 | 10.9 |
| Other causes..... | 18,099 | 2,185 | 12.1 | 15,914 | 12.1 |
| Total..... | 31,448 | 8,696 | 27.7 | 22,752 | 27.7 |

HEALTH AND INDUSTRIAL HYGIENE

Ability of Patients to Pay for Medical Care

THE BASIS for determining the ability of patients to pay for medical care and the best methods or procedures to be followed by the out-patient clinic in fixing a fair rate of payment formed the subject of the report of a special committee on out-patient service presented at the annual meeting of the American Hospital Association in San Francisco in August, 1928. A summary of this report in *Modern Hospital*, October, 1928, describes the methods in use in five clinics which have devoted special attention to this matter. These clinics are the out-patient departments of Lakeside Hospital, Cleveland; Michael Reese Hospital, Chicago; Harper Hospital, Detroit; the Boston Dispensary, Boston; and the Cornell Clinic, New York.

In the Cleveland hospital the applicant for treatment is first interviewed by the social worker, who secures data on the income, size of the family, and responsibilities of the patient, and from these data the margin available for medical care is computed after comparison of the income or expenditures with a standard budget, which is adjusted to cover single persons and families of different sizes. Although the social worker secures this information in the initial interview, the actual business relationship with the patient is in the hands of the out-patient cashier, as in this way the proper balance is kept between the social and financial factors involved. The budgets used in determining the eligibility of an applicant for treatment in the clinic are regarded as minimum figures, as they are based on a budget for families of small income compiled by the associated charities of the city and a study of the rents reported by 100 patients accepted for clinic care. Allowance is made for the age of the children, two sets of figures covering different age groups being given. Other conditions which would affect the ability of the patient to pay are also taken into consideration in determining the applicant's financial standing. These include the number of dependents other than children, rent standards, educational standards, debts, previous illnesses, and the degree of thrift and competence shown in managing the income. These determine whether the larger or the smaller budget or a modification of either will be used in determining the patient's financial classification.

There are various other modifying factors which may affect the patient's ability to pay. Thus certain diseases necessitate increased expenditures for articles of diet, supplies, special clothing, special equipment, and there may be increased expenditures for household supplies, all of which have the effect of reducing the income. Home expenses may also be increased because of the illness of the home manager, whose work may have to be done by another.

In the final decision if there is any question as to the veracity of the patient's statements or any evident incongruity, the state-

ments are verified through visits to the homes, interviews with employers, and consultation of public records regarding property ownership or other natural sources of information.

In the Chicago hospital the economic eligibility of patients applying for medical care is estimated from data secured as to the occupation, wages, and regularity of employment of the head of the household, the earnings of other members of the family and their contribution to the household budget, and other possible sources of income, such as membership in a lodge or insurance company from which they can obtain benefit. After the income and the responsibilities are determined, taking into consideration all these varying factors, the results are compared with budgets estimated for a normal self-supporting family, a single self-supporting woman, and a single self-supporting man. These budgets are based on the minimum financial requirements of families in their respective groupings, the amount of the budget being fixed at \$87.70 per month for a man and wife; \$97.88 when there is a child aged 3; \$115.87, with a girl aged 5 and a boy aged 3; and \$142.23 with a girl aged 12, one aged 5, and a boy aged 3. There are three grades for admission to the clinic—A, with an admission fee of \$50; B, \$25; and C, free—and patients are classified as A, B, and C according to their conformity to budget figures and are required to pay the corresponding admitting fee or are admitted without charge. The conclusions as to costs on which the budgets were based were determined by a study of the expenditures of reliable families who were maintaining a standard of living conforming to that adopted as representative by the committee. The budget allowed a family a minimum of medical service and no provision for special needs. Individual investigation of the financial standing of patients is not done, for the reason that in the majority of cases it is considered unnecessary and if it were necessary the time required for it makes it prohibitive. In cases where such doubt exists, the patient is assigned to the clinic and a special form is attached to the medical record informing the examining physician that there is a question as to the patient's eligibility and his opinion is desired concerning the patient's complaint and the diagnostic services necessary.

The Cornell Clinic was started in 1921 for the purpose of serving those persons who were unable to pay at private office rates for the medical service they needed but whose financial status did not justify their being treated in the clinics which were free or charged merely nominal fees. In this clinic it was decided that three principles should guide in determining the eligibility of applicants—the resources of the patient, including the extent to which he could draw on the family for his personal medical needs; his responsibilities; and the usual cost, at private rates, of the kind of medical care required in the individual case.

Patients, in general, considered eligible for treatment are single individuals with incomes from \$1,100 to \$1,800; families of two members with incomes from \$1,600 to \$2,200; of three members with incomes of \$1,850 to \$2,500; of four members with incomes of \$2,050 to \$2,750; and of five members with incomes of \$2,200 to \$3,000. The range indicated is due to consideration of standards of living and other variable factors.

The Boston Dispensary, in determining eligibility and income rating, uses an income schedule for single persons and families ranging from man and wife only to families with seven children. In addition to the income and size of family of the applicant for treatment the following facts are taken into consideration: Unemployment, length of illness, previous cost to patient, and the probable duration of the disability and the cost of treatment. If patients are found ineligible on account of their income they are referred to the evening clinic or to private physicians.

In the Harper Hospital information is secured as to the type and probable duration of illness, the occupation, wages, and length of employment of each member of the family, and income from roomers, boarders, and children, savings, insurance, and lodge. Automobile ownership, rent, payments on home, and debts are also considered. The income and responsibilities are considered in relation to minimum standard budgets varying from \$81.27 for a man and his wife to \$129.92 for a family of five. The clinic has a system of admission fees amounting to 25 cents, 50 cents, and \$1, or no fee at all is charged. If patients are considered ineligible they are referred to private care.

The committee concluded from its study that although the same general principles are followed in the different hospitals studied, any clinic wishing to establish such a system would need to adapt the procedure to fit local conditions and needs. The variation of budgets according to community and the necessity for frequent revision was also stressed and it was pointed out that no budget can be applied rigidly and that numerous other factors besides family income must be taken into consideration.

Death of Industrial Chemist from Radium Poisoning ¹

A NEWSPAPER report of November 15, records the death of Dr. S. A. von Sochocky who was formerly an official of the United States Radium Corporation, and who is said to have originated the formula used in the New Jersey plant of that company in painting watch and clock dials. It was reported earlier in the year that Doctor von Sochocky was a victim of radium poisoning. Radium necrosis was reported at that time to have attacked his jaws and fingers and he was also suffering from the aplastic anemia which was the eventual cause of his death.

Several fatal cases of poisoning have occurred among young women employed in the New Jersey plant as a result of the ingestion of the radioactive paint. It was shown in these cases that in addition to their effect in causing a bone necrosis the radioactive elements have a profound effect on the blood-forming centers of the human system causing an anemia of a pernicious type.

¹ For a discussion of the hazards connected with the use of radioactive materials see Labor Review, November, 1925, pp. 181-187; January, 1926, pp. 171-174; May, 1926, pp. 18-31; July, 1928, pp. 42, 43.

National Conference on Mutual Benefit Associations¹

A NATIONAL conference on mutual benefit associations was organized in the spring of 1928 by representatives of nationally known business establishments and other organizations. The conference is expected to serve as a clearing house of experience and information on mutual benefit associations and to encourage the formation of these and similar organizations in order that there may be developed a keener appreciation of and interest in health promotion in industrial undertakings. The first of a series of local or regional conferences was held under the auspices of the Brooklyn Chamber of Commerce on April 11 and a similar meeting was held in Boston on June 14.

Although mutual benefit associations as first organized were designed to meet the need of the members for assistance in the event of sickness or death only, they have developed with the generally increased interest in the prolongation of life so that one of their important functions now is the promotion of better health conditions among industrial workers. The problem which is presented by the contingencies of sickness, accident, old age, and death can be met in only one of two ways—either through the personal and group initiative of employers and groups of employees or by legislation and public direction. In European countries the State has largely assumed the task of maintaining the system of insurance against these eventualities for the mass of the workers but the theory of State responsibility has been slower of acceptance in this country. It was the belief, however, of those organizing the present movement that the "encouragement of self-action and intelligent dealing with acute problems of self-protection will prove the only alternative to State control."

In the new association, which is expected to have a national scope, chambers of commerce, management associations, and employers and employees who have a history of successful cooperation in the field of industrial relations are cooperating and their discussions have served to clarify the purposes of the mutual benefit association movement and the problems the associations have to meet. A representative of the Associated Industries of Massachusetts, for example, stated that the problem is an important one to the manufacturers of that State for, as they see it, it is not a problem simply of providing for benefits in the way of aids in case of sickness, accident, or death, but it is one of securing better employees to carry forward the industries of the State. Speaking of the reasons for which benefit associations are formed, the director of an association covering from six to eight thousand employees said that the old argument that benefit associations would reduce the turnover and build up the reliability and morale of the force did not seem to him an important element but that benefit associations were a means of raising the efficiency of the working force and delaying superannuation. He urged the managers of benefit associations, therefore, to study their records to ascertain if the amount of time lost really is diminished by the workings of their associations.

The importance of the physical examination, especially the periodic examination, and of the medical work of the associations was stressed

¹ News letter of National Conference on Mutual Benefit Associations, May-June, 1928, and article entitled, "Confer on Mutual Benefit Groups," reprinted from *Current Affairs*, July 2, 1928.

by many of the speakers. It is in the intelligent evaluation of the effects of the employment, the institution of measures to safeguard the health of employees, and the measures which may be taken as a result of the physical examination to prevent or delay the onset of disabling illness that the mutual benefit association finds its greatest field of usefulness. The opportunity offered by the study of the disabilities of large groups of employees, to correct conditions leading to disability which would be unnoticed if cases were dealt with solely on the basis of the individual, is evident. In one plant keeping careful records of the time lost through absence on account of sickness the time was cut in half over a 6-year period. The analysis of sickness records reveals the more frequent causes of disability and enables those in charge of health activities to improve or guard against the causes of these conditions. Analysis of the records of one association showed that respiratory diseases represent 54 per cent of the absences and 47 per cent of the time lost, and that the common cold causes 39 per cent of the absences for men and 31 per cent of the absences for women. When a company has thus, by accumulated data, discovered the principal causes of disability, a point of attack is secured which often enables those in charge of the health work to clear up the causes or greatly ameliorate conditions.

In summing up the objectives of the national conference at the Boston meeting, Mr. Meyer-Bloomfield, consultant in industrial relations, stated that the business cost of absences through illness amounts to at least half a billion dollars annually, and that, because of this loss, the national conference was organized to make American industry "health-conscious." The following points were suggested as coming within the scope of an employee mutual benefit association:

1. To provide at lowest possible cost the financial relief needed by members who suffer loss arising from sickness, accident, and death and thus save the members from having to resort to charity, and
2. To promote mutual welfare activities which help reduce if not prevent the need of relief. Constructive programs of health maintenance are a sure help to this end, as they lessen the avoidable causes of the anxieties and sufferings of members and their family.

For membership: The voluntary basis is the most common and the soundest. In some States it is unlawful for the employer to require the employee to contribute to any fund as a condition of employment. Yet it is desirable to secure large enrollment. The insurance feature calls for 75 per cent enrollment. The answer is in making the association attractive, putting an active employee committee in charge, making membership automatic with privilege to withdraw, "selling" the association energetically, and stressing the cash savings from reduced sickness.

For benefits: The insurance feature is foremost. The standard is 3 per cent of the pay roll—1½ per cent from each side—employer and employees; two-thirds pay for 26 weeks' sickness, and a year and a half salary death benefit. The mutual benefit association, provided it is treated not as a pauper institution but as a mutual business, will, if well managed, create a surplus for desirable welfare services.

The employer's contribution: The employer's contribution is made primarily to encourage employees in promoting health and well-being which concerns employer and employee alike. In no sense is mutuality more free from sham than in the common concern to keep men fit. This is the central point.

In brief, when employer and employee enter into a mutual benefit bargain, the contract between them is primarily one of partnership in keeping fit. They are practically to cause less and less relief to be needed.

The proof of success will be in the improving physical condition of the employees, and in their favoring those fellow workers who show willingness to cooperate in health promotion.

Nurseries for Infants in Polish Factories

SPECIAL nurseries for the infants of woman wage earners must be installed in factories in Poland which employ more than 100 women, according to a provision which became effective July 29, 1928.¹

This measure was included in the Polish law of July 2, 1924, for the protection of women and young persons, but the date for its enforcement was several times postponed.

It is stated that the Minister of Labor looks upon this provision as inadequate and is framing a bill making it mandatory for workshops employing less than 100 women to make special contributions for the maintenance of collective nurseries. Such contributions will be turned over to sickness funds or other public utility institutions, which will be directed to set up "nurseries for infants in all places where numbers of women are employed."

¹ International Labor Office. Industrial and Labor Information, Geneva, Oct. 8, 1928, p. 48.

WORKMEN'S COMPENSATION

Workmen's Compensation Legislation of 1928

THE outstanding event in the progress made in workmen's compensation legislation during the year 1928 was the act of Congress extending to the employers and employees of the District of Columbia the benefits of the longshoremen's and harbor workers' compensation act. The Legislature of Porto Rico enacted a new law which allows private insurance in addition to the State fund insurance. The Philippine Legislature also passed a new law. Among the States, New Jersey and New York stand out. New Jersey lifted the minimum and maximum weekly payments and New York passed a great number of amendments, particularly to improve the administration of its act. Rhode Island has shown a tendency to get away from court administration. The subject of improving the administration of the acts was probably the most common objective of the legislatures which acted on the subject.

Of the 43 States having compensation laws, only 7 met in regular session in 1928 (Kentucky, Louisiana, Massachusetts, New Jersey, New York, Rhode Island, and Virginia). All seven acted on the subject of workmen's compensation. Two States not having compensation acts (Mississippi and South Carolina) also held regular sessions but did not act on the subject. The legislatures of seven States met in extra sessions (California, Illinois, Iowa, Kansas, Nevada, North Dakota, and Wisconsin) but did not pass any compensation legislation. In addition to their regular sessions, the Louisiana, Mississippi, and New Jersey Legislatures met in extra session, the latter in three extra sessions; the legislation of these was not available at the time of publication except that of the first New Jersey extra session. The Seventieth Congress of the United States and the Legislatures of Porto Rico and the Philippines were also in session during the year. Arizona had an extra session in December.

District of Columbia

BY AN act of the first session of the Seventieth Congress, approved May 17, 1928, the provisions of the longshoremen's and harbor workers' compensation act of 1927 were extended to the District of Columbia. The act applies to any employees of any employer carrying on any employment in the District of Columbia, irrespective of where the injury occurs, except (1) a master or member of a crew of any vessel, (2) railroad employees when engaged in interstate or foreign commerce or commerce solely within the District of Columbia, (3) employees covered by the Federal employees' compensation act, and (4) employees engaged in agriculture, domestic service, or any

employment that is casual and not in the usual course of trade, business, occupation, or profession of the employer.¹

Kentucky

A RESOLUTION was passed creating a committee for the purpose of investigating the workmen's compensation act and to report "any defects therein, amendments thereto, or bills which they desire to recommend to the 1930 general assembly."

Louisiana

TWO acts concerning compensation were passed. Paragraph 9 of section 8 of the compensation act as amended in 1922 (Act No. 43, Acts of 1922) provided that in cases where a lump-sum settlement is made without the approval of the court, "or at a discount greater than 8 per cent per annum even if approved by the court," the employer shall be liable for compensation at twice the rates fixed in the act. In 1926 (Act No. 85) the penalty was changed to one and one-half times compensation but the amendment dropped that part in quotation marks above. The 1928 amendment (Act No. 242) put the quoted part back into the law. (See *Musick v. Central Carbon Co.*, Supreme Court, Louisiana, May 7, 1928, 117 So. 227.) Because of an apparently unintentional omission in paragraph 18 (2), section 8, No. 85, Acts of 1926 (see No. 216, Acts of 1924) "a period of 300 weeks" was put back into the law fixing the period of compensation for death. The provisions found in paragraph 17 of section 8 concerning hernia have been dropped from the act. Act No. 126 of the Acts of 1924, authorizing State charity hospitals to charge and recover by legal action in workmen's compensation cases was amended (No. 29, Acts of 1928) by dropping the requirement that the employer and his insurer be made "codefendants" with the patient in legal proceedings to hold them liable.

Massachusetts

TWO acts concerning compensation were passed. The permanent partial disability schedule has been redrafted along more detailed and liberal lines (ch. 356). Unpaid losses under the workmen's compensation policies have been given preference over other claims (except taxes) in the distribution of assets of insolvent insurers (ch. 171).

New Jersey

SIX acts concerning compensation were passed at the regular session in 1928. By far the most important change was the increase in the maximum and minimum weekly payments from \$17 to \$20 and from \$8 to \$10, respectively. The periods of compensation for certain scheduled permanent partial disabilities were extended (ch. 135). The commissioner of labor and each deputy commissioner of compensation is authorized to appoint a representative to act for a person entitled to compensation when it shall appear that the person is

¹For further analysis of the act, see Labor Review, June, 1928, p. 72.

mentally, legally, or physically unable to properly receive or disburse the compensation or who can not be located (ch. 136). The compromise or composition of disputed claims on behalf of minors must now be approved by the workmen's compensation bureau instead of the court of common pleas (ch. 225).

The compensation bureau was empowered to require an employer or his insurance carrier to furnish artificial limbs or other appliances in certain cases (ch. 149). When an award finally granted is less than \$200 in excess of the amount theretofore offered or paid an attorney's fees may not be allowed to exceed \$50 (ch. 224). Municipalities and fire districts are now authorized to provide compensation insurance for volunteer firemen (ch. 163).

New York

THE coverage of the act was extended to include employers employing four or more workmen though the employment is not carried on for pecuniary gain (ch. 755). Occupational diseases were compensable formerly if incurred in any process involving the use of named material but now may also be allowed if caused by the "use of or direct contact with," the material. (See *Sokol v. Stein Fur Dyeing Co.*, 216 App. Div. 573.) Occupational diseases are now compensable within 12 months if due to the nature of employment and contracted therein, "or in a continuous employment similar to the one in which he was engaged at the time of disablement."

An award for amputation anywhere below the "elbow or knee" heretofore was for a fixed amount of 244 and 205 weeks, respectively, and above the elbow or knee, 312 and 288 weeks, respectively, whereas now, under the amendment, an award for an amputation above the "wrist or ankle" may be proportionate up to 312 and 288 weeks, respectively. Greater freedom is allowed in determining the annual average earnings by allowing consideration of other employments (ch. 754). Physicians or surgeons in the employ of the department of labor are prohibited from treating a compensation claimant or to refer the claimant to a particular physician. Referees must direct that medical treatment be given but may not designate the physician to give such treatment. If the treatment is not given within five days after recommendation the employee may secure treatment at the expense of the employer or carrier (ch. 752). Chapters 725 and 646 amended the law regarding the employment of minors and the compulsory education law and in so doing greatly enlarged the possibility of violating section 14a of the compensation act, allowing double compensation to illegally employed minors.

Notice in the case of occupational disease must be given to the commissioner and to the employer within 90 days after the disablement. The board may now, by unanimous vote, permit the filing of a claim after one year but not exceeding two years after the date of the accident, when in the interest of justice. The requirement concerning the reporting of accidents has been modified by now requiring the reporting of only those accidents which cause loss of time on other than the day or shift of occurrence or which require treatment beyond ordinary first aid. An award may now be modified by increasing or, if part of the compensation is unpaid, decreasing the rate from the date of

the injury. Changes of referees in successive hearings upon a claim, except for good cause, is now forbidden (ch. 754).

The New York State insurance fund was empowered to insure employers under the Federal longshoremen's act (ch. 750). In the absence of express exclusion of part of an employer's employees from the coverage of an insurance policy all employees are to be deemed covered by the policy (ch. 754). Provisions concerning an appeal from an award were liberalized. To deter employers and carriers from taking an appeal merely to delay payment, the board may levy not to exceed \$25 additional compensation upon them. Appeal may be taken from any part of an award, in which case the part not appealed from may be paid without prejudicing rights as to appealed parts (ch. 754). Representation before the State industrial board and its referees is limited to regular employees of insurance carriers, attorneys or counsellors at law, or citizens of the United States or corporations of New York licensed by the industrial commissioner upon nomination of the State industrial board and in accordance with the rules of the board (chs. 584 and 749). Chapter 753 required the industrial commissioner to exhibit in his office to all insurance carriers, for 30 days, an itemized statement of the expenses of administering the compensation law, following notice to all of them and before assessment of the expenses upon them.

Philippines

THE Philippine Legislature passed an act (No. 3428, 7th Leg., 3d sess., 1928) on December 10, 1927, which was permitted to become a law without the signature of the Governor General. The law is compulsory and applies to public as well as private employments. The industries covered are those exercised for gain; the gross income of which was not less than 40,000 pesos (\$20,000), except agriculture, charitable institutions, and domestic service. If the gross income was less than 40,000 pesos, Act No. 1874 of 1908 will apply. Awards are based on wages, with the maximum limited to 3,000 pesos (\$1,500).²

Porto Rico

A NEW act was passed (No. 85, Acts of 1928), effective August 12, 1928, and superseding the act of 1918. Many important changes were made, the most important of which was the replacing of the compulsory exclusive State fund insurance system by the direct liability of the employer for compensation. Payment of awards is assured by insurance in private or mutual insurance companies, in the competitive State insurance fund or by the deposit of bonds or other securities in the case of self-insurers. The coverage was broadened by including employees receiving wages of more than \$1,500 a year.

Employees guilty of "gross negligence" were not entitled to an award under the old act, but now "recklessness" bars recovery. Maximum payment for death has been reduced from \$4,000 to \$3,000. The minimum and maximum of \$2,000 and \$4,000 in the case of total disability have been reduced to \$1,000 and \$3,000. The

² For analysis of the act see Labor Review, April, 1928, p. 79.

amounts payable for scheduled permanent partial disabilities instead of being fixed in amount now have minimum and maximum amounts for each disability. The time limit on the filing of claims has been omitted from the new act.

The employer, insurer, or the industrial commission may now designate the physician-surgeon for the case.

Provision has been made for expediting the decision of the commission by mandamus in case of unjustifiable delay, for settlement of awards by agreement subject to the approval of the commission, and for appeals from the commission's decisions. If an employer fails to secure the payment of compensation, suit may be brought and in such suit the employer will be presumed to be guilty of negligence and is also deprived of his common-law defenses. New reports are required, penalties are increased, and fees are limited or made subject to the approval of the commission.³

Rhode Island

TWO acts were passed. Formerly where the parties failed to reach an agreement or where the commissioner of labor failed to approve any agreement the matter was taken to the superior court. The act as amended by chapter 1207 provides that the commissioner of labor shall hear and decide the matter. However, it appears that if the parties do not agree with the commissioner's decision the superior court may hear questions of law and fact all over again. Chapter 1159 increased the salary of the deputy commissioner of labor from \$2,800 to \$3,000.

Virginia

THREE acts were passed in Virginia concerning compensation. All injuries must now be reported to the industrial commission instead of only those causing absence from work for more than seven days. Fees of attorneys, physicians, and hospitals are now subject to award as well as approval by the commission (ch. 19). No appeal can now be taken from the decision of one commissioner until a review of the case has been had before the full commission and an award entered by it (ch. 227). Authority to grant permits to insurance carriers and to regulate insurance rates was granted to the State corporation commission and several other changes were made by the amendment and reenactment of section 75 (ch. 445).

United States

BECAUSE of the view taken by the Attorney General of the United States that it did not devolve upon the district attorneys of the various districts to represent the compensation commission or its deputy commissioners, Congress passed an amendment to the longshoremen's act making it the duty of the district attorneys to appear as attorney or counsel and represent the commission or deputy in court.

On February 1, 1928, an act of Congress was approved which provided "That in case of the death of any person by the neglect or

³ See discussion in Labor Review, September, 1928, p. 98.

wrongful act of another within a national park or other place subject to the exclusive jurisdiction of the United States, within the exterior boundaries of any State, such right of action shall exist as though the place were under the jurisdiction of the State within whose exterior boundaries such place may be; and in any action brought to recover on account of injuries sustained in any such place the rights of the parties shall be governed by the laws of the State within the exterior boundaries of which it may be.⁴

Constitutionality of Longshoremen's Compensation Act

THE first attempt to test the constitutionality of the Federal longshoremen's and harbor workers' compensation act in the United States Supreme Court was found in the petition for a writ of certiorari to the Court of Appeals of New York in the case of Joseph Chernik, petitioner, *v.* Clyde Steamship Co. The Supreme Court, on October 22, 1928, denied the petition.⁵ There was no opinion written in any court in this case.

In Chernik's petition for the writ of certiorari under the heading "Facts" the following statement of the case is found:

On August 15, 1927, petitioner was injured while employed as a longshoreman in unloading the steamship *Delaware* on navigable waters within the State of New York, said injury being the direct result of the negligence of the respondent. He filed suit to recover therefor in the Supreme Court of New York, county of Kings. Respondent moved to dismiss and the motion to dismiss was argued before Special Term Part One of the Supreme Court of the State of New York, held in and for the county of Kings in the Borough of Brooklyn, city of New York. The motion to dismiss set up the act of Congress known as the longshoremen's and harbor workers' compensation act as its defense, saying that the petitioner's sole remedy was under this said act. Petitioner contended that said act was unconstitutional and invalid. The said court upheld the validity of said act, and from its decision the petitioner appealed to the New York Court of Appeals where again the validity of said act was upheld without any opinion, and its mandate or remittitur was handed down to the court of first instance and final judgment entered thereon on June 7, 1928. This judgment of the State court is final except for petitioner's right of appeal to this court. The decision of the State court upholding the validity of the longshoremen's and harbor workers' compensation act utterly disregards the rights of the petitioner under the Constitution of the United States. If this decision is to remain unchallenged in New York, the Constitution of the United States will thereby be nullified. Petitioner therefore urges this honorable court to require said case to be certified to it for review and determination.

Ohio State Fund Rate Classification Upheld

THE rate classification of the Ohio State fund, based upon the nature of the employer's business and not on the various individual jobs or functions of particular employees making up the employer's business, was upheld in the Supreme Court of Ohio on June 20, 1928, in the case of State ex rel. Reaugh Construction Co. *v.* Industrial Commission. (162 N. E. 800.)

⁴ See Labor Review, November, 1928, p. 78.

⁵ See Labor Review, September, 1928, p. 90; 49 Sup. Ct. 33 (advance sheets).

The Reaugh Construction Co. on January 24, 1928, mailed to the Ohio Industrial Commission its pay-roll report of operations for the previous six months, setting forth particular jobs in detail. The insurance rates to be paid were fixed according to the particular job. The industrial commission refused to accept the pay roll as submitted and reclassified the pay-roll sheets at higher rates and premiums than those fixed by the construction company. The company paid the premiums under protest and brought an action in mandamus in which it was alleged that the company was in the building-construction business, that the refusal of the industrial commission to permit the company "to segregate its pay roll among the available classifications" in the industrial commission's manual of rates was arbitrary and a gross discrimination against the company which amounted to the taking of the company's property without due process of law. The Supreme Court of Ohio on June 20, 1928, denied the writ of mandamus and upheld the action taken by the industrial commission. In a per curiam decision the court said that "classification can not be applied to an occupation or industry as an individual unit. The classification contemplated by the workmen's compensation law relates to occupations or industries as a class, operating generally under similar conditions." If the court followed and adhered to the counsel of the company the ultimate effect might result in the classification of certain occupations or industries according to the particular "job" or the size of the various individual jobs engaged in by the employer and not according to a general system applying to similar industries or occupations as a class. The court pointed out that the actuary for the commission testified that it was not only impracticable but physically impossible to classify the occupation of an employee; that the classification adopted by the industrial commission was based on the nature of the employer's business and not upon the various functions that he may do that make up his particular business; that the hazard to a carpenter, for instance, depends upon the nature of the industry and the character of the work in which he is engaged; and that the individual carpenter's hazards are not the same in every occupation where a carpenter may be employed, as in some the hazards are greater than in others. The actuarial audit of January 1, 1926, made on behalf of the industrial commission, speaking of the system of classification of industries, states that the fund has "used as a basis the classification of industries originally made by the committee of statisticians representing governmental bureaus and workmen's compensation statisticians—and actuaries, as developed by the National Council on Workmen's Compensation Insurance, and the International Association of Industrial Accident Boards." The court further pointed out that the classification was committed to the sound discretion and judgment of the industrial commission and from the evidence adduced we are "unable to say that the commission abused its discretion, or that it capriciously or arbitrarily discriminated against the relator [company], who occupies the same class as do others who do business of the same character."

Compensated Industrial Accidents in New York State, 1927 and 1928

A REPORT on compensated industrial accidents in New York, just released in mimeographed form by the bureau of statistics and information of the State department of labor, notes a reduction of 5.5 per cent in the total number of accident claims closed in 1928 as compared with 1927. Every industry group except those of construction and service contributed to this downward trend, the manufacturing industries leading with a decline of 12 per cent, followed by transportation and public utilities each with a 7 per cent reduction. Construction accidents increased 1 per cent, while accidents in the service group, including all kinds of clerical, office, professional, and municipal work, hotels and restaurants, care of buildings, and amusement places, went up 5 per cent.

The total number of accident claims that were closed in 1928 amounted to 93,565 as against 98,984 in 1927. The number of fatality claims and permanent total disability claims increased somewhat, while a decrease is noted in the numbers of permanent partial and temporary disability claims. The following table summarizes the report:

NUMBER AND COST OF COMPENSATED ACCIDENTS IN NEW YORK STATE, 1927 AND 1928, BY KIND OF DISABILITY

| Kind of disability | Number of cases closed, year ending June 30— | | Amount of compensation, year ending June 30— | |
|------------------------|---|--------|---|--------------------------|
| | 1927 | 1928 | 1927 | 1928 |
| Death..... | 1,042 | 1,129 | ¹ \$6,980,588 | ¹ \$7,337,641 |
| Permanent total..... | 41 | 52 | ¹ 547,620 | ¹ 764,491 |
| Permanent partial..... | 18,518 | 17,021 | 14,044,685 | 13,192,522 |
| Temporary..... | 79,383 | 75,363 | 6,613,110 | 6,708,421 |
| Total..... | 98,984 | 93,565 | 28,186,003 | 28,003,075 |

¹ Present value based on the age of the dependents in death cases and on the age of the claimants in total disability cases.

It will be noted that the reduction in the number of cases in which awards were made was not reflected in a corresponding reduction in the amount of compensation paid. A partial explanation of this situation appears to be the fact that, effective October 1, 1927, the maximum weekly compensation payable to an injured worker was increased from \$20 to \$25. This, however, affected only those injuries sustained subsequent to October 1. Another reason given for the lack of reduction in the compensation cost is the increase in the number of deaths and permanent total disability cases, the average compensation per fatal case being \$6,499 and of permanent total cases, \$14,702. Approximately one-half of the total cost was incurred by permanent partial cases, which constituted less than 20 per cent of the total number of claims.

The report states that over 1,163,000 weeks represent the time loss in the permanent partial and temporary cases, and if the customary allowance of 6,000 days is given to the death and permanent total

cases, the time allowance would be advanced to about 2,340,000 weeks, representing a loss to society of the "productive labor of over 45,000 men and women for one whole year."

Cost of Eye Injuries in New York State

OBVIOUSLY, eye injuries handicap the worker seriously. But they are also costly to industry. This latter statement may be verified by consulting the Industrial Bulletin for October, 1928, issued by the New York State Industrial Commissioner, which discloses the fact that in the year ending June 30, 1928, the average compensation paid per case for such injuries was \$586 or nearly twice as much as the average for all compensated accidents. The total compensation paid was \$1,716,175 in 2,929 cases, or 6.1 per cent of the total compensation paid in all of the 93,565 cases compensated.

In stating that permanent disabilities are more important in eye injuries than any other type of injury, the report adds that \$1,460,452, or 85 per cent of the total compensation for eye accidents, was awarded for permanent partial disabilities, that is for partial loss of vision of one or both eyes or total loss of vision of one eye. The average cost per case was nearly three times that of other permanent partial disabilities. Temporary disabilities as a class are of shorter duration and less costly because "usually if an eye injury is serious at all it is likely to be serious enough to cause some permanent defect in vision."

A summary of the number and cost of eye injuries in New York State is afforded in the following table, compiled from the report:

COMPARATIVE NUMBER AND COST OF ALL INJURIES AND OF EYE INJURIES IN NEW YORK STATE, 1924 TO 1928

| Year ending June 30— | All cases | | | Eye injuries | | |
|----------------------|-----------|-------------------|----------|--------------|-------------------|----------|
| | Number | Compensation cost | | Number | Compensation cost | |
| | | Total | Average | | Total | Average |
| 1924..... | 72,983 | \$26,590,104 | \$364.33 | 2,048 | \$1,507,607 | \$736.14 |
| 1925..... | 76,216 | 27,854,726 | 365.47 | 2,311 | 2,058,086 | 890.56 |
| 1926..... | 99,673 | 28,995,476 | 290.91 | 3,025 | 1,831,724 | 605.53 |
| 1927..... | 98,984 | 28,186,003 | 284.75 | 2,948 | 1,703,235 | 577.76 |
| 1928..... | 93,565 | 28,003,075 | 299.29 | 2,929 | 1,716,175 | 585.93 |
| Total..... | 441,421 | 139,629,384 | 316.32 | 13,261 | 8,816,827 | 664.87 |

The average duration of disability in eye cases during the year 1927-28 was 100.2 weeks for permanent partial disabilities and 3.5 weeks for temporary disabilities, as compared with 43.9 and 5.5 weeks, respectively, for all accidents.

A little more than 25 per cent (25.5) of the eye injuries was due to hand tools, this being the most prolific cause. Miscellaneous flying particles came second, with 25.2 per cent, and harmful substances third, with 16 per cent. This is not materially different from the record in the preceding year.

No fatalities are recorded, but 10 permanent total disabilities are listed, with the present value of compensation given as \$137,786.

Recent Workmen's Compensation Reports

Kansas

THE workmen's compensation act of Kansas of 1927 (ch. 232) placed the administration of the workmen's compensation act under the public service commission. This commission recently published its annual report of the workmen's compensation department for the fiscal year ending June 30, 1928. A large part of the report consists of the reporting of awards made by the commission. The following table is a reprint of one of the most interesting found in the report:

INDUSTRIAL ACCIDENTS REPORTED DURING THE FISCAL YEAR ENDING JUNE 30, 1928

| Industry | Temporary total disabilities | Permanent total and partial disabilities | Deaths | Total |
|---|------------------------------|--|--------|-------|
| Clerical and professional service..... | 147 | | | 147 |
| Construction..... | 1,605 | 50 | 17 | 1,672 |
| County and municipal..... | 106 | 1 | 1 | 108 |
| Manufacturing: | | | | |
| Food and kindred products..... | 2,159 | 52 | 13 | 2,224 |
| Metal goods, vehicles..... | 991 | 57 | 3 | 1,051 |
| Paper and paper products, printing..... | 120 | 9 | 1 | 130 |
| Smelters and oil refineries..... | 318 | 7 | 1 | 326 |
| Textiles, leather, laundry..... | 80 | 2 | | 82 |
| Wood and other building materials..... | 401 | 15 | 1 | 417 |
| Mining, metallurgy and quarry: | | | | |
| Coal mining..... | 431 | 18 | 6 | 455 |
| Metal mining—lead and zinc..... | 629 | 27 | 10 | 666 |
| Drilling oil and gas wells..... | 1,026 | 46 | 6 | 1,078 |
| Quarrying, stone crushing..... | 102 | 4 | 2 | 108 |
| Trade..... | 307 | 7 | | 314 |
| Transportation and public utilities: | | | | |
| Steam, interurban, and street railways..... | 413 | 19 | 3 | 435 |
| Motor transportation..... | 96 | 2 | 1 | 99 |
| Light, power, and gas companies..... | 355 | 8 | 8 | 371 |
| Express companies..... | 27 | | | 27 |
| Total..... | 9,313 | 324 | 73 | 9,710 |

Nebraska

THE report of the Department of Labor of the State of Nebraska for the 2-year period ended December 31, 1927, contains a review of the legislation passed in 1927, several tables showing the result of the experience of the State, of insurance companies, and of employers under the workmen's compensation law, and calls special attention to the case of *Jackson v. Ford Motor Co.*, 115 Nebraska 758, 214 N. W. 631, in which the Supreme Court of Nebraska "decided, in effect, that the commissioner's approval of a lump-sum settlement was not essential, before a judgment could be entered relieving the employer (or insurance company) of further liability."

During the 2-year period, 18,821 accidents occurred in 1926, of which 40 were fatal, and in 1927 there were 19,045 accidents, 32 being reported as fatal.

The report contains two interesting tables showing the wages of both men and women as found in the accident reports filed with the department for the year 1927. These tables will be of interest to States desiring to fix a weekly maximum compensation at a percentage of the

average weekly wage of injured employees.¹ The report pointed out that the average wage of the men appeared to be much higher than the average wage for the women. Though the number of women employed and injured may be small compared with the number of men employed and injured, yet the general influence of the lower standard of wage will tend to reduce the average weekly wage of all injured employees. In other words, the fixing of a maximum weekly wage from time to time by the legislature at a given percentage of the average weekly wage of all employees fixes a maximum not based upon the average weekly wage of injured male employees but fixes a maximum based upon a wage scale influenced by the lower scale of wages paid to women.

Ohio

THE Industrial Commission of Ohio has published its annual statistical report, prepared by the division of safety and hygiene, containing a detailed statistical study of all accident and occupational disease claims filed with the Industrial Commission of Ohio during the calendar year 1926. The report contains an interesting analysis of occupational-disease claims according to the industry in which they originated. This table is reproduced below. Of the 939 occupational-disease claims analyzed, the fifth annual report of the department of industrial relations states that 671 cases were due to dermatitis, 155 were due to lead poisoning, 11 were due to benzol, 5 were due to brass poisoning, 2 were due to wood alcohol, 1 was due to poisoning by gas, 1 was due to carbon dioxide, and 93 were unclassified.

NUMBER OF CASES AND TIME LOST DUE TO OCCUPATIONAL DISEASES IN 1926,
BY INDUSTRY GROUP

| Industry | Number of cases | | | | | Days lost | | | |
|--|-----------------|-----------------------------------|-------------------|--------------------------------|--------------------|-----------|-----------------------------------|-------------------|--------------------------------|
| | Fatal | Perma- nent disa- bility | Over 7 days | 7 days and un- der | No time lost | Fatal | Perma- nent disa- bility | Over 7 days | 7 days and un- der |
| Building erection and demolition..... | 5 | | 43 | 8 | 14 | 30,000 | | 1,626 | 32 |
| Construction (not building erection)..... | | | 2 | 4 | 2 | | | 91 | 10 |
| Chemicals and allied products..... | 2 | | 36 | 18 | 31 | 12,000 | | 1,608 | 64 |
| Clay, glass, and stone products..... | 3 | | 42 | 7 | 32 | 18,000 | | 2,197 | 26 |
| Foods and beverages..... | 1 | | 21 | 12 | 17 | 6,000 | | 910 | 59 |
| Laundries..... | | | 10 | | 7 | | | 492 | |
| Leather and leather goods..... | | | 6 | 2 | 10 | | | 182 | 14 |
| Lumber and wood products..... | 2 | 1 | 27 | 3 | 24 | 12,000 | 6,000 | 1,639 | 15 |
| Blast furnaces, steel works, rolling mills, etc. | 2 | | 11 | 4 | 7 | 12,000 | | 540 | 20 |
| Assembling and erecting machinery..... | | | 1 | | | | | 24 | |
| Machinery manufacture..... | | | 35 | 10 | 29 | | | 1,294 | 51 |
| Metal goods..... | 6 | | 162 | 48 | 125 | 36,000 | | 6,081 | 221 |
| Vehicles..... | | | 63 | 10 | 25 | | | 2,111 | 41 |
| Paper and printing..... | 3 | | 20 | 13 | 25 | 18,000 | | 540 | 72 |
| Rubber and composition goods..... | 2 | | 93 | 37 | 42 | 12,000 | | 2,900 | 183 |
| Textiles..... | 1 | | 17 | 2 | 7 | 6,000 | | 1,232 | 6 |
| Miscellaneous..... | | | 6 | 1 | 6 | | | 259 | 3 |
| Mining..... | | | 5 | 1 | 1 | | | 714 | 1 |
| Transportation..... | | | 3 | 11 | 4 | | | 56 | 21 |
| Utilities..... | | | 1 | 2 | 5 | | | 8 | 12 |
| Cartage and trucking..... | | | 2 | | 1 | | | 52 | |
| Commercial..... | 1 | | 50 | 2 | 25 | 6,000 | | 2,193 | 12 |
| Clerical and professional employments..... | | | 4 | 1 | 2 | | | 67 | 6 |
| Care and custody of buildings and grounds..... | | | 24 | 3 | 1 | | | 767 | 16 |
| Public employees..... | 2 | | 23 | 2 | 1 | 12,000 | | 1,138 | 8 |
| Total..... | 30 | 1 | 707 | 201 | 443 | 180,000 | 6,000 | 28,721 | 893 |

¹ See Labor Review, July, 1928, pp. 53, 54.

Tennessee

THE fifth annual report of the Tennessee Department of Labor contains a brief report of the division of workmen's compensation for the calendar year 1927. Attention is called to the fact that as the Tennessee act is administered through the courts this necessarily limits the authority of the division to an advisory capacity. However, it is gratifying to note that the courts appear willing to reopen cases when it is shown that an injustice has apparently been done in making an award, and the division had the satisfaction of being instrumental in reopening 60 claims wherein final settlement had been made, an investigation revealing that the injured was entitled to additional compensation. In such claims \$15,032.05 additional, or an average of \$250.53 each, was obtained, ranging from \$15 to \$1,297. In 1926 the amount thus paid was \$8,145.85 in 31 claims reopened.

A new step inaugurated by the division on July 1, 1927, was the practice of returning to the employer all accident reports where the injured was not disabled as long as one whole day or shift, in order "to comply with the request of the United States Department of Labor for uniform accident reporting in all of the various States."

The report tabulates 137 fatal and 16,998 nonfatal cases, 9,367 of the latter being noncompensable. The total compensation paid for injuries occurring during 1927 was \$375,219.92. Including incurred compensation carried over from cases filed during preceding years, a total of \$677,286.43 was paid in 1927.

Manufacturing industries reported the greatest number of accidents (11,410, or 66.6 per cent), the contracting industry being next (2,469 or 14.4 per cent). Eighty-three of the fatalities occurred in manufacturing and 26 in contracting. The greatest number of accidents in manufacturing occurred in foundries.

Wisconsin

THE Industrial Commission of Wisconsin, in its publication, Wisconsin Labor Statistics, Bulletin No. 12, October 5, 1928, published a table containing compensable cases closed in the calendar year 1927, a summary of which follows:

COMPENSATION CASES SETTLED DURING 1927, BY CAUSE AND BY NATURE OF INJURY

| Cause of injury | Total number of injuries | Death and permanent total disability cases | Permanent partial disability injuries | Temporary disability injuries | Amount of indemnity paid | Amount of medical aid paid | | | |
|--|--------------------------|--|---------------------------------------|-------------------------------|--------------------------|----------------------------|-------------------|------------------|------------------------------------|
| | | | | | | In fee cases | | | Number of contract and other cases |
| | | | | | | Number of cases | Total amount paid | Average per case | |
| Machinery..... | 3, 257 | 12 | 840 | 2, 405 | \$852, 514 | 2, 865 | \$159, 107 | \$56 | 392 |
| Hoisting apparatus..... | 541 | 13 | 85 | 443 | 192, 067 | 434 | 40, 793 | 94 | 107 |
| Vehicles..... | 1, 808 | 45 | 106 | 1, 657 | 476, 397 | 1, 601 | 124, 098 | 424 | 207 |
| Falling objects..... | 1, 259 | 21 | 69 | 1, 169 | 213, 715 | 1, 029 | 54, 855 | 53 | 230 |
| In mines and quarries..... | 49 | 6 | 5 | 38 | 37, 732 | 40 | 3, 305 | 83 | 9 |
| Falling trees..... | 218 | 15 | 13 | 190 | 54, 776 | 188 | 19, 820 | 105 | 30 |
| Falls of persons..... | 2, 851 | 34 | 135 | 2, 682 | 586, 314 | 2, 602 | 162, 355 | 62 | 249 |
| Stepping on or striking against objects..... | 1, 395 | 4 | 55 | 1, 336 | 132, 980 | 1, 215 | 51, 877 | 43 | 130 |

COMPENSATION CASES SETTLED DURING 1927, BY CAUSE AND BY NATURE OF INJURY—Continued

| Cause of injury | Total number of injuries | Death and permanent total disability cases | Permanent partial disability injuries | Temporary disability injuries | Amount of indemnity paid | Amount of medical aid paid | | | |
|--|--------------------------|--|---------------------------------------|-------------------------------|--------------------------|----------------------------|-------------------|------------------|------------------------------------|
| | | | | | | In fee cases | | | Number of contract and other cases |
| | | | | | | Number of cases | Total amount paid | Average per case | |
| Hand tools..... | 1,532 | 1 | 137 | 1,394 | \$198,299 | 1,330 | \$56,160 | \$42 | 202 |
| Hand trucks..... | 444 | 1 | 20 | 423 | 45,684 | 365 | 14,520 | 40 | 79 |
| Handling objects..... | 2,958 | 4 | 132 | 2,822 | 239,895 | 2,574 | 95,099 | 37 | 384 |
| Piling or decking..... | 62 | 3 | 8 | 51 | 26,142 | 57 | 7,024 | 123 | 5 |
| Loading and unloading..... | 597 | 2 | 37 | 558 | 65,878 | 529 | 22,586 | 43 | 68 |
| Sharp or rough objects..... | 1,494 | 3 | 115 | 1,376 | 124,677 | 1,321 | 57,072 | 43 | 173 |
| Electricity..... | 98 | 16 | 9 | 73 | 91,337 | 71 | 8,968 | 126 | 27 |
| Explosives..... | 63 | 4 | 4 | 55 | 11,625 | 57 | 5,520 | 97 | 6 |
| Steam-pressure apparatus..... | 25 | 1 | — | 24 | 5,773 | 20 | 870 | 44 | 5 |
| All other explosions..... | 70 | 3 | 4 | 63 | 14,530 | 67 | 5,007 | 75 | 3 |
| Hot and corrosive substances..... | 745 | 2 | 15 | 728 | 58,649 | 652 | 33,013 | 51 | 93 |
| Miscellaneous causes..... | 610 | 13 | 55 | 542 | 159,689 | 552 | 37,686 | 68 | 58 |
| Occupational diseases..... | 397 | 8 | 4 | 385 | 73,743 | 343 | 14,962 | 44 | 54 |
| Total..... | 20,473 | 211 | 1,848 | 18,414 | 3,662,406 | 17,912 | 974,697 | 54 | 2,561 |
| <i>Occupational diseases</i> | | | | | | | | | |
| Metallic poisons..... | 36 | — | — | 36 | 5,627 | 31 | 1,816 | 59 | — |
| Toxic gases, vapors, and fumes..... | 31 | 3 | — | 28 | 18,201 | 29 | 1,340 | 46 | 2 |
| Toxic fluids..... | 103 | — | — | 103 | 5,547 | 86 | 3,311 | 39 | 17 |
| Irritant dusts and fibers..... | 75 | 2 | — | 73 | 15,223 | 69 | 2,416 | 35 | 6 |
| Germ..... | 15 | — | — | 15 | 904 | 14 | 1,052 | 75 | 1 |
| Anthrax..... | 1 | — | — | 1 | 90 | 1 | 65 | 65 | — |
| Miscellaneous irritants..... | 43 | — | 2 | 41 | 3,400 | 34 | 623 | 18 | 9 |
| Air compression..... | 27 | 1 | — | 26 | 6,595 | 26 | 1,307 | 50 | 1 |
| Extremes of humidity..... | 3 | — | — | 3 | 72 | 2 | 36 | 18 | 1 |
| Extremes of temperature..... | 17 | 1 | 1 | 15 | 8,222 | 14 | 566 | 40 | 3 |
| Excessive light..... | 4 | — | — | 4 | 271 | 3 | 67 | 22 | 1 |
| Causing inflammation of joints, tendons, and muscles..... | 23 | — | — | 23 | 1,116 | 20 | 583 | 29 | 3 |
| Occupational diseases or hazards not otherwise classified..... | 19 | 1 | 1 | 17 | 8,475 | 14 | 1,780 | 127 | 5 |
| Total..... | 397 | 8 | 4 | 385 | 73,743 | 343 | 14,962 | 44 | 54 |

¹ As given in report; items add to 49.

Alberta

THE tenth annual report of the Workmen's Compensation Board of the Province of Alberta, for the year ended December 31, 1927, states that, of the 10,149 accidents reported during the year 59 proved fatal, 129 resulted in some permanent disability, and 9,961 were of a temporary nature. Compensation covering temporary disabilities and amounting to \$371,787 was paid, \$415,422 was transferred to the pension fund to cover awards for permanent disabilities and fatal accidents, and \$106,770 was set up as a liability to cover pending claims. The table following shows the causes of accidents reported during the year 1927.

CAUSES OF ACCIDENTS REPORTED IN ALBERTA DURING 1927

| Cause | Number of accidents | | | |
|--|---------------------|-----------------------------------|-----------------------------------|--------|
| | Fatal | Perma- nent disa- bility | Tempo- rary disa- bility | Total |
| Burns and scalds..... | 1 | 2 | 242 | 245 |
| Burst bottles and broken glass..... | | | 103 | 103 |
| Electrical shock and burns..... | | | 16 | 16 |
| Explosions..... | 5 | | 29 | 34 |
| Falling timber and poles..... | 2 | 2 | 361 | 365 |
| Falling and tripping..... | 9 | 7 | 1,387 | 1,403 |
| Falling rock, coal, and clay..... | 12 | 4 | 708 | 724 |
| Flying and falling objects..... | | 15 | 1,608 | 1,623 |
| Heavy lifting, loading wagons and trucks..... | | | 418 | 418 |
| Infection from handling meats and materials..... | 1 | 2 | 192 | 195 |
| Inhalation of gas fumes..... | | | 46 | 46 |
| Machinery, tools, and equipment..... | 8 | 68 | 1,571 | 1,647 |
| Injured by horse and in runaways..... | 1 | 2 | 196 | 199 |
| Protruding nails and spikes..... | | 1 | 341 | 342 |
| Cranking automobiles..... | | | 72 | 72 |
| Struck by automobiles and trucks..... | | 1 | 49 | 50 |
| Splashing of mixtures..... | | | 37 | 37 |
| Run over, struck by, or caught between cars..... | 6 | 5 | 431 | 442 |
| Derailment of mine cars..... | 1 | 1 | 69 | 71 |
| Slivers and splinters..... | | 3 | 211 | 214 |
| Crushed..... | 1 | 12 | 355 | 368 |
| Striking against objects..... | 1 | 2 | 352 | 355 |
| Frost bites..... | | 1 | 93 | 94 |
| Drowned..... | 7 | | | 7 |
| Miners' phthisis..... | 2 | | | 2 |
| Miscellaneous..... | 2 | 1 | 1,074 | 1,077 |
| Total..... | 59 | 129 | 9,961 | 10,149 |

Application of Law Relating to Occupational Diseases in France¹

THE French decree of May 4, 1921, which provided for the compulsory reporting of cases of poisoning from lead and mercury under the law of October 25, 1919, was replaced by a decree of February 19, 1927, providing for the compulsory reporting of diseases arising from the use of various other poisons. These substances include the hydrocarbons and their chlor and nitro derivatives, notably benzene, tetrachlorethane, carbon tetrachloride, chloroform, the nitrobenzenes, etc.; aniline and its derivatives; carbon bisulphide; nitrous vapors, chlorine, bromine, hydrofluoric acid, sulphurous acid, hydrogen, sulphide and the sulphohydrate of ammonia, hydrocyanic acid, carbon monoxide, phosgene, formaldehyde; white phosphorus and phosphuretted hydrogen; arseniuretted hydrogen and other arsenic compounds; tar, oils, cement, and other caustic products, chromic acid and the alkaline chromates; and X rays and radioactive substances.

According to the provisions of the law, applications for compensation must be made to the mayor of the commune by the worker within 15 days after giving up work, and this declaration must be accompanied by a physician's certificate. A certified copy is sent immediately by the mayor to the manager of the enterprise and to the departmental labor inspector.

The new law does not extend the compensation features of the former law but provides for the compulsory reporting of these diseases

¹ Bulletin du Ministère du Travail, Paris, April-June, 1928, pp. 158-165.

for the purpose of contributing to the study of the prevention of occupational diseases and the ultimate extension of the law.

For the first time since 1919 the number of cases of lead poisoning have shown a decrease compared with those reported in the preceding year. In 1927 there were 1,040 cases reported as compared with 1,505 in 1926. This decrease is ascribed in part to a slowing down of industrial activity, but it was also reported by a number of factory inspectors that the improvement was in some cases due to better working conditions.

The largest number of cases of lead poisoning, 335, occurred in enameling, while there were 322 in the manufacture and repair of storage batteries, 129 in the smelting and refining of lead, 42 in various kinds of painting, 38 in printing establishments, 37 in factories manufacturing white lead and minium, 34 in metal foundries, and the remainder were scattered among a variety of industries and occupations.

Lead colic was the symptom reported in 686 cases of lead poisoning and lead colic with anemia in 28 cases, while the others involved a variety of symptoms. There were 2 deaths, 3 cases of permanent partial disability, 1 case carried the right to a pension, and 1 case in which there was probably permanent partial disability. In 7 cases there was no interruption of work, 18 resulted in disability of less than 8 days, 693 in disability of 8 to 15 days, 76 in disability of 16 to 30 days, 9 in disability of more than 30 days, while the period of disability was not reported in 230 cases. Seventy-seven of the cases of lead poisoning occurred among women.

There were 4 cases of mercury poisoning, 3 of which occurred in cutting fur for felt hats and 1 in a storage battery establishment. These cases, all of which occurred among men, involved 1 case of mercurial stomatitis and tremors, 1 of mercurial tremor, and there was 1 case listed as acute poisoning and 1 as chronic poisoning. The period of disability was one month in 1 case, 42 days in another, and in 2 cases the length of disability was not reported.

There were 36 cases of poisoning reported as due to various chemical substances. These included 3 cases of phosphorus necrosis, 1 of them fatal, 1 case of tar cancer, and 1 case of pulmonary tuberculosis caused by chlorine.

LABOR LAWS AND COURT DECISIONS

Labor Legislation of 1928

THE Federal, State, and Territorial legislation of 1928 includes some interesting as well as important labor laws. The New Jersey Legislature repealed the fee-fixing provision of its private employment agency law, held unconstitutional by the United States Supreme Court, but added a provision similar to that in the Wisconsin law, which permits licenses to be withheld if it appears that the needs in a given locality are adequately served by public or private employment agencies. This power is somewhat similar to that of the United States Comptroller of the Treasury in withholding approval on certain charters to banks if the existing needs are adequately served. New York and Rhode Island gave attention to the subject of child labor. Massachusetts has taken the first step toward the establishment of an old-age pension system in that State. Kentucky enacted a mothers' pension law, which leaves only the States of South Carolina, Georgia, Alabama, Mississippi, and New Mexico without mothers' aid legislation.

Nine States met in regular session (Kentucky, Louisiana, Massachusetts, Mississippi, New Jersey, New York, Rhode Island, South Carolina, and Virginia). Seven other States met in extra session (California, Illinois, Iowa, Kansas, Nevada, North Dakota, and Wisconsin). In addition to the regular session, the Louisiana, Mississippi, and New Jersey Legislatures met, the last in three extra sessions, the legislation of which was not available at the time of publication except that of the 1st New Jersey extra session. The 70th Congress of the United States held its first session and the Legislatures of the Territories of Porto Rico and the Philippines were in session during the year. Arizona had an extra session in December.

Contract of Employment

THE Mississippi law making a person who entices certain laborers to breach their contracts criminally liable and liable for damages has been amended so that it now includes a person, "who knows or has such information as would make a reasonable person believe that a laborer or renter has contracted with another person for a specified time" (ch. 292). Virginia has strengthened her law, making it a criminal offense to enter into a contract of employment to perform personal service in the cultivation of the soil and thereby obtain advances under the contract with intent to defraud the employer by refusing or failing to perform the contracted work (ch. 91).

Private Employment Offices

LOUISIANA passed an act providing for the licensing of private employment agencies. The act makes itself effective through its fee provisions. The license tax amounts to \$500, but employ-

ment bureaus in cities and towns which maintain regular offices and which transact their business in such offices are required to pay only \$25 license tax (ch. 135). Because of the decision of the United States Supreme Court in the case of *Ribnik v. McBride*,¹ holding the provision of the New Jersey act requiring the approval of fees by the commissioner of labor to be unconstitutional, the New Jersey Legislature amended its laws and did away with this requirement. The act, however, now provides that schedules of fees shall be posted in a conspicuous manner in the employment office and that licenses may now be withheld if it appears to the satisfaction of the commissioner of labor that the needs of employers and employees in any given municipality are adequately served by public free employment agencies or by licensed private employment agencies (ch. 283).²

Hours of Labor

NEW YORK amended (sec. 181, ch. 50) its labor laws prohibiting females over 16 to work more than 6 days a week or at night by exempting "duly licensed pharmacists" from the prohibition (ch. 567). Rhode Island limited the hours of labor of children under 16 to 9 hours in 24 and 48 hours a week (formerly 10 hours in any 24 and 54 hours a week) in any "factory, manufacturing, mechanical, business, or mercantile establishment" (ch. 1231).

Wages

LOUISIANA passed three acts on the subject of wages. The first, Act No. 7, made it unlawful for any person to retain more than 10 per cent of any moneys collected from employees as physicians' fees, or to pay to the physician employed less than 90 per cent of the amount actually collected from employees for this purpose. Act No. 47 provided that several employees having claims for wages against the same employer, which claims arose out of a common transaction, may assign their claims to any person for the purpose of collection and that such assignment need not be for a valuable consideration. Act No. 115 exempts from garnishment one-half of the wages of all laborers and certain other employees up to \$250 per month, but in every case such exemption shall not be less than \$75 per month, except for common farm laborers and domestic servants whose wages shall be entirely exempt.

New Jersey improved the possibility of better enforcement of the biweekly wage payment law by increasing the penalty for violation from \$25 to \$100, to \$50 for the first offense and \$100 for subsequent offenses, by allowing penalty to be recovered in the name of the Department of Labor of the State, and by providing in detail for the enforcement of the act (ch. 150).

Porto Rico, in establishing a system of local self-government for its municipalities, provided in section 84 of the act that no part of the salary of any municipal officer or employee shall be subject to attachment (ch. 53). Virginia amended its law exempting from garnishment wages amounting to \$50 per month owing to a house-

¹ 48 Sup. Ct. 545, May 28, 1928. See Labor Review, July, 1928, p. 68.

² See also New Jersey repealing act (ch. 247).

holder by extending this exemption to heads of families and "wages owing or to be owing" (ch. 81).

The father and mother in Kentucky were given equal rights to earnings of their minor children (ch. 152). In New Jersey the right of married women to their earnings under certain conditions received attention (ch. 241).

Child Labor

THREE States acted on the subject of child labor. New York passed three acts on the subject, one amending the education law (ch. 646), one amending the labor law (ch. 725), and one amending the penal law (ch. 697). On the subject of school attendance the minimum age of compulsory school attendance is fixed uniformly at 7 years. Hitherto it has been 7 years in cities and school districts of 4,500 population and over employing school superintendents, and 8 years elsewhere. The maximum age continues to be 16 but city boards of education may make it 17. Ten days added to the school year lengthens it to 190 days. All unemployed children between 7 and 16 years of age must attend full time if physically and mentally fit, and in cities whose boards of education so require, all unemployed children between 16 and 17, also. Section 621 of chapter 646 defines "employed children." Excepting high-school graduates, employed children must attend part-time day instruction from four to eight hours a week in cities of 20,000 population or over and in school districts having 200 or more of such children. Elsewhere boards of education may require such attendance. As an alternative, school authorities may adopt the Antioch College half-time plan. Youths of 17 to 21 unacquainted with the English language must attend night schools.

Chapter 725 makes the labor law conform more nearly to the education law by making its prohibition against labor by children under 14 years of age more nearly State-wide as to territory and universal as to occupations. This it effects by amending section 130 of the labor law so as to forbid employment of such children in any "trade, business, or occupation carried on for pecuniary gain," besides the occupations, factory, mercantile, etc., hitherto enumerated. The provision of section 391, subdivision 3, of the labor law, limiting to villages of 3,000 or more the law's application as to these enumerated occupations other than factory work, still stands in the statute. Without using the words "pecuniary gain," chapter 646 continues the education law's prohibition against labor by children under 14 "in any business or service" (sec. 629) and excepts therefrom outdoor work for parents when school is not in session by children from 12 to 14 years of age. The limitation to work for parents is new. Subdivision 2 of section 131 of the labor law, as added by chapter 725, also excepts church, school, musical, theatrical, and motion-picture performance by children of any age in accordance with section 485 (subdivision 5) of the penal law, as amended by chapter 697. Subdivision B of section 629 of the education law, in chapter 646, has a corresponding provision relative to the penal law, possibly of the same intent, but obscure. Section 638 of chapter 646 appears to except also sale of newspapers or periodicals and bootblacking in cities of 20,000 population or over by boys of 12 to 14 outside school

hours and hours between 7 p. m. and 6 a. m. Eight p. m. has been the latest hour heretofore.

Children between 14 and 17 years of age (except children over 16 on farms) may not work without an employment certificate, vacation permit, or street-trades badge. Hitherto this limitation has applied to children between 16 and 17 only in cities of 5,000 population or over and only during school hours. The above outdoor and theatrical exceptions relative to children under 14 apply also to children over 14. Girls under 18 years of age may not sell or deliver newspapers or periodicals or work as bootblacks, a prohibition hitherto applied to girls under 16. School authorities of cities of 20,000 population or over may supplement the law relative to street-trade employment of male minors, including those under 18, but may not change the age minimum or lengthen the hours. An employer may protect himself against falsity of a minor's claim to be 17 by requiring such minor to procure a certificate of age from a school certifying officer.

As to working papers, an employment certificate is limited to a particular employer. Acceptance of it by any other employer is a penal offense. The school certifying officer must see that the employer's pledge of employment conforms to the labor law's hour and occupation limitations. He must require the child to sign the certificate. The employer must require the child to sign a second time. An affidavit is no longer proof of age. Issuance of a newsboy's or bootblack's badge is conditional upon evidence of age and physical fitness. Vacation permits expire when the schools open in September. School authorities may limit them to Saturdays and to summer vacations. Upon termination of a child's employment, the employer must at once mail the employment certificate or vacation permit and the record of physical examination to the school certifying officer, instead of returning the employment certificate to the child as heretofore.

Concerning physical fitness, the amendment provided that, except in New York City, Buffalo, and Rochester, physical examinations of children are to be made by school medical inspectors instead of health officers. The school certification officer must send the employer a copy of the physical examination findings. A certificate of fitness is not good for reemployment if a year old. The physical examination must precede issuance of the school record. Parents must put their children into proper physical condition when reasonably possible. Certificates of limited physical fitness may be issued to physically unsound minors 16 to 18 years of age as a basis for employment in certain occupations.

Penalties for parental delinquency are more severe. Private, parochial, and business schools must report to public school superintendents transfer or discharge of their pupils. An employer must discharge an employed child reported for delinquent attendance upon part-time instruction. Town board appointments of attendance officers are subject to approval by school superintendents and are due to be made on or before the first of August. If a town board does not act, the school superintendent must appoint. Attendance officers may enter public places, as well as places of employment, in discharge of their duties. If school authorities so request, the police of a city

of 200,000 population or less must enforce the law as to newsboys and bootblacks.

Rhode Island passed two acts on the subject of child labor. The first changed the prohibition of certain night work to children under 16 from 8 o'clock to 7 o'clock (ch. 1222). The provision prohibiting boys under 12 and girls under 16 from street trades and bootblacking in cities having over 70,000 inhabitants has been made applicable to cities having over 40,000 (ch. 1223). A section was added to chapter 85 of the general law providing that no child under 16 shall be employed in any "factory, manufacturing, mechanical, business, or mercantile establishment" more than 48 hours a week, nor more than 9 hours in 24 (ch. 1231).

Virginia revised, consolidated, amended, and codified her school laws and now has compulsory school attendance up to 15 unless the elementary course has been completed, the child is regularly employed, or the child lives farther than 2 miles from the school (ch. 471).

Safety and Health

KENTUCKY passed an act regulating suction and exhaust systems upon certain machinery (ch. 124). New Jersey amended the title of one of its factory regulating acts (ch. 108). New York subjected certain enumerated fireproofing factory partition and wall material to the approval of the department of labor and added cinder or concrete block or tile to the enumerated list of material (ch. 726). The Porto Rican law requiring physicians to be provided by certain employers has been extended to a larger group of employers (No. 16). Rhode Island has made provision for boiler inspection by "authorized inspectors" who are certain employees of insurance companies (ch. 1197). Massachusetts provided for the physical examination of persons handling food and who are suspected of having contagious or infectious disease (ch. 229).

Pensions

OLD-AGE pensions.—Probably the first step has been taken toward the establishment of an old-age pension system in Massachusetts by creating a public bequest commission authorized to receive gifts for a "public bequest fund" which is to be used in aiding aged men and women (ch. 383).

Mothers' pensions.—Kentucky passed a mothers' pension law (ch. 17). Illinois permits a larger proportion of taxes for this purpose (p. 3) and Louisiana apparently weakened her law by changing the word "shall" to "may" in the provision for payment of relief (act 228).

Public employees.—The retirement and pensioning of public employees was the subject of legislation in several States: Massachusetts (chs. 251, 355); New York (chs. 222, 294, 301, 326, 481, 534, 555, 556, 557, 571, and 713); Porto Rico (No. 33).

Vocational Education

VIRGINIA codified her school laws, including the vocational educational provisions (ch. 471, sec. 625), and New Jersey amended her vocational rehabilitation law by providing two more members for the State commission (ch. 34).

Group Life Insurance

MASSACHUSETTS and New Jersey passed statutes concerning group life insurance. Massachusetts broadened its definition to include trade-unions (ch. 244) and New Jersey newly provided that insurance companies may make group insurance "at special rates for groups covering not less than 25 employees" (ch. 222).

Miscellaneous

IN MASSACHUSETTS, Armistice Day was made a holiday (ch. 235). Louisiana acted on the subject of giving preferences for local labor and domestic materials (Acts Nos. 30 and 116) and Wisconsin passed a joint resolution (No. 7) relating to the subject of such preferences. Convict labor received attention in several States: Louisiana (Nos. 189, 293); Massachusetts (ch. 387); Mississippi (ch. 45); New York (chs. 146, 167, and 805); South Carolina (No. 892); Virginia (chs. 150, 153, 154, 487, 511, 525, and 526). Mechanics' liens was the subject of legislation in several States: Louisiana (Nos. 171, 172); Mississippi (chs. 136 and 137); New Jersey (chs. 58, 67, 247 (p. 459), 253, J. Res. No. 10); New York (chs. 13 and 236); South Carolina (No. 600); Virginia (ch. 253).

Labor Departments

NEW YORK passed several acts amending its laws to make them conform to the law reorganizing the State departments (chs. 145, 146, 167). Rhode Island increased the salary of the deputy commissioner of labor from \$2,800 to \$3,000 (ch. 1159). Virginia increased the term of the commissioner from 2 to 4 years (ch. 19, p. 17).

Shipowners' Employment Agency Activity Not a Combination In Restraint of Trade

THE Shipowners' Association of the Pacific Coast and the Pacific American Steamship Association are not combinations in restraint of interstate and foreign trade in their maintenance of central employment agencies through which members of the associations employ seamen, according to a decision in the United States District Court for the Northern District of California.

Anderson, a seaman, on behalf of himself and other seamen, brought a suit to enjoin the Shipowners' Association of the Pacific Coast, the Pacific American Steamship Association, and their members and agents from maintaining a combination in restraint of interstate and foreign commerce and to recover damages. The

associations composed of shipowners operating on the Pacific coast operated an employment bureau (subsequent to 1921 called the Marine Service Bureau) through which seamen were hired. Anderson alleged that he attempted to register at the San Francisco office maintained by the associations and was refused registration because he could not produce his service record or discharge book. He alleged that he was then employed by the mate of a vessel owned by a member of one of the associations and was instructed to obtain an assignment card from the employment bureau. The card was refused. He nevertheless reported to the vessel under orders from the mate only to be finally rejected because the mate had been ordered to take no seamen except through the employment office of the associations. The suit was dismissed in the United States district court and this decree was affirmed in the United States Circuit Court of Appeals. The case was then taken to the United States Supreme Court, which reversed the lower court and held that the complaint of Anderson stated a good cause of action. The court said:

"Taking the allegations of the bill at their face value, as we must do, in the absence of countervailing facts or explanations, it appears that each shipowner and operator in this widespread combination has surrendered his freedom of action in the matter of employing seamen and agreed to abide by the will of the associations. Such is the fair interpretation of the combination and of the various requirements under it, and this is borne out by the actual experience of the petitioner in his efforts to secure employment. These shipowners and operators having thus put themselves into a situation of restraint upon their freedom to carry on interstate and foreign commerce according to their own choice and discretion, it follows, as the case now stands, that the combination is in violation of the antitrust act (15 U. S. C. A. secs. 1-7, 15). (*Anderson v. Shipowners' Ass'n*, 272 U. S. 359, 364.)

The case then went to the United States District Court for the Northern District of California and a trial was had, but judgment did not favor Anderson, as the court pointed out that he had failed to prove that the associations and their members had bound themselves to employ seamen exclusively through the Marine Service Bureau and that the practices of the associations and the operators of the bureau did not evidence a combination in restraint of trade. In reaching this conclusion the court pointed out that, after the complaint of Anderson was filed, but prior to the trial, the agents had made two changes in the form of the documents used by them. One consisted in the elimination from the certificate or service-record book of any statement that seamen would be employed only through the Marine Service Bureau and must be registered there, and any statement that such service record or discharge book must be presented in order to obtain employment. The ship-assignment cards no longer contain the requirement that the bureau's assignment card be also presented. The court pointed out that since the facts at the time of trial are the controlling facts in an action of this type, the court could not and would not consider the possible effects on the case of the documents formerly used.

The court said that the opinion of the United States Supreme Court is limited to a ruling that, if the associations and their members had in fact bound themselves to employ seamen only through the Marine Service Bureau in the manner alleged in the complaint of Anderson, they would then have restrained their freedom in the conduct of

foreign commerce. The district court rendered an opinion in part as follows:

The chief question, therefore, is as to whether the evidence shows that defendants and their members have in fact bound themselves by agreement, tacit or express, to employ seamen through the Marine Service Bureau exclusively. On this issue the evidence shows an entire absence of express agreement. Further, the evidence fails to show any tacit understanding, binding upon the members of defendants, requiring them to employ through the Marine Service Bureau alone, and to hire no seamen not registered there.

Officers of steamship companies, members of defendants, and the managers of the Marine Service Bureau offices at San Francisco and San Pedro testify that, while most of the members of the two defendant associations secure a large proportion of their seamen through the Marine Service Bureau, all of the members hire some seamen from other sources, who never register at the bureau. The proportion of men hired outside the bureau varies widely. In some instances it is a small percentage, but certain companies use the bureau only for 50 per cent or less of their requirements. Two member companies do not use the bureau at all.

The testimony is that, if the port captain, master, or mate, or other authorized person, desires a particular man who has registered at the bureau, that man will be hired, irrespective of his number or position on the list at the bureau. Men may be hired out of turn, as the result of interviews by ship's officers or company agents at the bureau, or as the result of a request for men of particular experience or of a certain nationality.

It is further testified that the master or mate of a vessel may, and frequently does, reject a man sent from the bureau, and that that man returns to the bureau for employment without loss of the priority due his registration number. The seaman also is free to refuse the employment, if not satisfied with the ship or the wages offered.

The bureau has nothing to do with wages. Each member of defendants pays such wages as are necessary in the current economic situation. Similarity of wage scales is due to similarity of condition, rather than to any agreement among defendants or their members. No penalty is or has ever been imposed upon any member of defendant associations for the independent selection of seamen above mentioned. This evidence is uncontradicted.

It is true that the members of defendant associations support the Marine Service Bureau by dues in the case of the Shipowners' Association, and by special assessment in the case of the Pacific American Association. But mere payment of such dues does not show an agreement to use the Marine Service Bureau exclusively. The weight of the contrary evidence, showing that the members of defendants vary so widely in their use of the bureau, rebuts any presumption which might arise from the mere maintenance of the bureau. There is further evidence to the effect that the existence of the Marine Service Bureau has materially assisted in bringing shipmaster and seaman together, which is sufficient explanation, if any were needed, of the willingness of the members of defendants to support it.

As before stated, the service-record books no longer contain any intimation that no seaman will be employed who can not produce such a book. The practice of the companies and of the Marine Service Bureau also shows that employment is not conditioned upon presenting such books. The mode of their use does not indicate any agreement by defendants or their members making possession of the service-record books (indicating registry with the Marine Service Bureau) a prerequisite to hiring.

The individual seamen, Anderson and others, who testified as to the operations of the Marine Service Bureau, in an attempt to prove that defendants had agreed to employ seamen through this agency only, and that the rules of the bureau were strictly and arbitrarily applied at the bureau and blindly followed by the members of defendants, may show that there are instances where infractions of their own rules by the agents of the bureau have worked injustice. Looking, however, to the volume of the business conducted by the bureau, and to the hardships necessarily attending upon the seasonal variations of the demand for and supply of seamen on the Pacific coast, I can not find that the evidence adduced goes further than the possibility of occasional injustice above mentioned. It does not establish the combination in restraint of trade alleged in the complaint. Some of the seamen complaining of failure for one reason or another to secure employment on account of the operation of the Marine Service Bureau

have since received employment through that bureau. Others may have in fact been discharged or rejected for other reasons than failure to register, even though this were the reason given by the agents of the company involved. (*Anderson v. Shipowners' Association of the Pacific Coast et al.*, 27 Fed. (2d) 163.)

Law on Employment Contracts of Theatrical Artists in Brazil ¹

ON JULY 13, 1928, a law was passed in Brazil dealing especially with contracts of employment of theatrical artists, including musicians, appearing at public performances undertaken for a lucrative purpose.

Contracts must state the place of employment, the duration of the contract, the nature of the work to be done, the remuneration agreed upon, and the method of payment. A contract omitting any of these items may be declared null and void. The employer must provide the artist with a signed statement covering the points mentioned above before work is begun and pending the signing of the contract.

If on account of illness an artist is prevented from working for a period exceeding 30 days the employer may cancel the contract and suspend the payment of his salary, but he is required to provide the artist with first-class transportation, including baggage, to the place of residence of the latter or, in lieu thereof, to the place where the contract was signed.

The management of the performance is responsible for accidents to artists which occur in the course of the execution of the contract. The liability of the employer in this respect is regulated by the workmen's compensation law of January 16, 1919, and its regulations.

New Labor Law of Venezuela

THE Bureau of Labor Statistics has recently received a copy of the new labor law of Venezuela and its regulative decree, appearing in the official journal (*Gaceta Oficial*) on August 13, 1928, and effective on that date. The following are important provisions of the law:

Coverage

THE law covers all public or private enterprises and establishments, irrespective of their nature, which exist at the present time in the Republic or which may be established in the future, including mining and industrial enterprises, agricultural and stock-raising undertakings, and mercantile establishments.

Workmen's Compensation

OWNERS of enterprises not expressly exempted are required to pay the wage earners, salaried employees, and apprentices in their employ compensation for industrial accidents and occupational diseases arising out of and in the course of employment, irrespective of any fault or negligence on the part of the workers, employees, or apprentices.

¹ *Jornal do Comercio*, Rio de Janeiro, July 20, 1928, quoted in *Industrial and Labor Information*, Geneva, Oct. 1, 1928, p. 16.

Although the following are exempt from the provisions of this law as regards workmen's compensation, they are to be governed by the provisions of the common law or special laws pertaining thereto:

(1) Workers employed in enterprises or establishments having a daily average of less than 25 wage earners, salaried employees, or apprentices; (2) when there is fraud on the part of the enterprise or the laborers, employees, or apprentices; (3) persons who perform occasional work distinct from that of the enterprise; (4) home workers; (5) members of the family of the owner of the enterprise who work exclusively for him and live under his roof; (6) employees receiving more than 600 bolivars¹ a month; (7) seamen and fishermen; (8) laborers, employees, or apprentices in agricultural or stock-raising enterprises; (9) laborers engaged in woodcutting enterprises or in the extraction of natural forest products; and (10) workmen, employees, or apprentices employed in enterprises which are covered by special legislation as regards workmen's compensation.

Benefits

The compensation scale is based upon the earnings of the injured employee at the time of the accident. Industrial accidents and occupational diseases are compensable when they cause death or disability, either permanent or temporary.

Death.—When the accident or disease causes death, the employer must pay to the relatives of the deceased an amount equal to two year's wages. In no case, however, may this compensation exceed 15,000 bolivars, regardless of the amount of the wage. The following relatives of the deceased shall be entitled to this compensation: (1) The legitimate and illegitimate children whose parentage is lawfully proved, under 18 years of age; (2) unmarried daughters over 18 years of age, legitimate or illegitimate, whose parentage is lawfully proved; (3) sons over 18 years of age if they are unable to earn a living due to a permanent physical defect; (4) the widow, until she remarries; and (5) the father and mother who were dependent on the deceased at the time of his death.

None of the persons indicated above has a preferential right. In case the compensation is applied for simultaneously or successively by two or more of the said relatives, the compensation is to be distributed among them equally. The employer must also pay the burial expenses, which will be in accordance with the status of the deceased and the local customs, but may not exceed 300 bolivars. This amount may not be deducted from the compensation payments.

The employer is exempt from all liability by payment of the compensation to the relatives of the deceased, who shall have made their claim within the three months following the death. At the expiration of this time the other relatives of the deceased shall have a right of action only to claim their proportion against the relatives who received the compensation. The right of action for claiming compensation terminates at the end of one year counting from the date of the accident or the beginning of the disease.

Permanent total disability.—A workman who is permanently and totally disabled as the result of an industrial accident or occupational

¹ Bolivar at par = 19.3 cents.

disease is entitled to compensation equivalent to two years' wages. This amount shall never exceed 15,000 bolivars irrespective of the amount of the wage.

The following shall constitute permanent total disability: (1) The total loss of both arms or both legs or one arm and one leg, or the loss of the essential parts thereof, the hand and the foot being considered as essential parts; (2) the total loss of the right arm above the elbow joint; (3) the total and permanent loss of movement of the extremities, equal to complete mutilation indicated in the two preceding numbers; (4) the loss of both eyes, either the destruction of the organ or the total loss of vision; (5) the loss of one eye with a diminution by more than one-half of the power of vision of the other; (6) incurable mental derangement; (7) organic or functional injury to the brain, or to the respiratory and circulatory organs, due directly to the mechanical action of the accident, and which is reported incurable; (8) all injuries similar to the aforementioned which cause a similar disability.

When two or more permanent partial disabilities occur simultaneously, constituting one of the cases given above, it shall be considered a permanent total disability and be compensable as such.

Permanent partial disability.—In cases of permanent partial disability resulting from an industrial accident or occupational disease the worker shall be entitled to compensation to be fixed in accordance with the loss of earning capacity caused by the accident. This compensation shall not exceed 10,000 bolivars nor the amount of one year's wages, regardless of the amount of the wage.

The following scale, contained in the regulative decree of the law, specifies the maximum period and amount of benefits to be paid according to the various permanent partial disabilities:

| Disability | Days | Amount (bolivars) |
|---|------|----------------------|
| Loss of left arm above elbow joint..... | 300 | 8, 100 |
| Loss of either forearm up to elbow joint..... | 270 | 7, 300 |
| Loss of a hand..... | 200 | 5, 400 |
| Total loss of a thumb..... | 100 | 2, 700 |
| Total loss of any other finger..... | 50 | 1, 350 |
| Total loss of thumb and another finger of the same hand..... | 130 | 3, 400 |
| Total loss of thumb and 2 other fingers of the same hand..... | 150 | 4, 000 |
| Total loss of thumb and 3 other fingers of the same hand..... | 170 | 4, 600 |
| Total loss of thumb and all other fingers of the same hand..... | 195 | 5, 300 |
| Total loss of 2 fingers of the same hand, other than the thumb..... | 90 | 2, 500 |
| Total loss of 3 fingers of the same hand, other than the thumb..... | 120 | 3, 300 |
| Total loss of 4 fingers of the same hand, other than the thumb..... | 150 | 4, 000 |
| Loss of 2 joints of any finger..... | 30 | 800 |
| Loss of 1 joint of any finger other than the thumb..... | 20 | 540 |
| Loss of the first joint of the thumb..... | 50 | 1, 350 |
| Loss of 1 or 2 joints of more than 1 finger simultaneously: | | |
| For the first joint..... | 20 | 540 |
| For each of the other joints..... | 10 | 270 |
| Complete loss of leg..... | 250 | 6, 800 |
| Loss of leg from the ankle to the knee..... | 200 | 5, 400 |
| Loss of foot up to the ankle..... | 150 | 4, 100 |
| Loss of any toe..... | 30 | 800 |
| Loss of 2 or more toes simultaneously: | | |
| For the first toe..... | 30 | 800 |
| For each of the other toes..... | 15 | 400 |
| Loss of vision in 1 eye..... | 250 | 6, 800 |
| Loss of hearing in 1 ear only..... | 60 | 1, 600 |
| Loss of hearing in both ears..... | 200 | 5, 400 |

Compensation for disabilities not specified above shall be determined by experts in conformity with the provisions of this law and its regulations and of the rules of medical science.

When two or more of the disabilities specified above occur simultaneously the compensation shall be equal to the sum of the benefits fixed for each one of the disabilities, but the total amount shall not exceed 10,000 bolivars nor the amount of one year's wages.

Temporary total disability.—For temporary total disability employers are required to pay the workers their regular wages during their disability, provided that it does not last longer than six months.

Temporary partial disability.—In cases of temporary partial disability the worker shall be entitled to compensation to be fixed in accordance with the loss of earning capacity and the duration of the disability. The compensation shall not exceed an amount equivalent to six months' wages.

Medical and pharmaceutical attention.—In addition to the compensation benefits described above, employers are required to furnish medical, surgical, and pharmaceutical attention to the workers who suffer from an occupational disease or an industrial accident. These expenses may not be deducted from the compensation payments.

If the enterprise maintains a hospital or clinic which has been declared by a public health official to be adequate to provide the medical or pharmaceutical attention, the injured worker shall be treated therein and shall not be able to demand that the attention be rendered elsewhere.

The refusal of the employee to accept the treatments and directions of the attending physician relieves the employer of all responsibility as regards the medical, surgical, and pharmaceutical attentions.

Occupational Diseases

The following occupational diseases, as given in the regulative decree, are compensable if contracted by the employees, laborers, or apprentices as a result of their work:

(1) Anthrax contracted in industries which use wool, hair, horse-hair, hides, and skins.

(2) Poisoning produced by (a) lead; (b) mercury; (c) phosphorus; (d) arsenic; (e) wood alcohol; (f) nitric acid and the derivatives chemically allied with benzine, such as dinitrobenzol, aniline, and others; (g) nitrogenous vapors; (h) carbon tetrachlormethane or any other substance employed in place of, or in conjunction with, a solvent of acetate or cellulose; and also the residium of these poisons, acquired in industries which produce or use such substances or their derivatives.

(3) Ulcerations from chromium contracted in industries which produce or use chromic acid, bichromate of ammonium, potassium, or sodium and their preparations or derivatives.

(4) Skin diseases contracted by the working of such wood as jabillo and others.

(5) Epitheliomatic cancer and ulcers of the skin or of the cornea of the eye, acquired in industries which produce, extract, or use pitch, tar, asphalt, mineral oil, petroleum, paraffin, and all other compounds, products, or residue of any of said substances.

(6) Glanders contracted in industries which involve the care or use of horses or of the cadavers or débris thereof.

(7) Cataracts of the eyes acquired in the glass-making industry and in all those which involve exposure to the brilliancy of melted glass.

(8) Diseases arising from excessive air pressure in industries which use compressed air.

(9) Diseases contracted from work in mines, such as (a) miners' nystagmus, (b) subcutaneous cellulitis of the hand, (c) subcutaneous cellulitis of the regions of the knee, (d) acute inflammation and abscess of the elbow, and (e) inflammation of the synovia of the wrist joint.

Accident Reporting

A worker who is injured as the result of an industrial accident or who contracts an occupational disease must notify, if he is able, the owner of the enterprise, the manager, or person in charge of the work, within 24 hours after it occurs. If he fails to do this within the period stipulated the latter will be exempt from responsibility as regards the medical, surgical, and pharmaceutical service.

Special Provisions

A physical defect caused by an industrial accident or occupational disease shall not be considered as a disability if it does not prevent the laborer, employee, or apprentice from performing with equal efficiency the same class of work which he was doing before the accident occurred or before the disease was contracted.

Diseases, such as hookworm and malaria, not caused by the occupation, but which are contracted by reason of residence in places which are endemic centers of such diseases, shall not entitle those suffering therefrom to compensation but to medical, surgical, and pharmaceutical attention in hospitals or clinics, when such establishments are provided by the employer.

Wages

THE fixing of wages shall be arranged between employers and workers without any interference. Wages shall be paid in legal currency either daily or weekly, at the latest, unless an agreement has been made for longer periods. No other form of payment is permitted. In no case may wages be paid in places of recreation, taverns, bars, or grocery stores.

Employment of Women and Children

NO YOUNG persons under 14 years of age shall be allowed to work in industrial establishments or mining enterprises. The working-day of minors over 14 and under 18 years of age shall not exceed six hours and shall be divided into periods of three hours with an interval of at least an hour during which they may leave the place of employment to eat or to rest.

Women and minors may be employed only between 6 a. m. and 6 p. m. Young persons between 14 and 18 may not be employed in

mines, foundries, or in work in which their lives are endangered or in which their normal physical development is impeded or retarded. Women are also prohibited from working in the interior of the mines.

Women and young persons shall not be employed in industries prejudicial to their morals or good habits and, in no instance, in the retailing of liquors.

Pregnant women shall not be allowed to perform physical work which requires considerable effort, which might impede the normal development of the unborn child. During the period of lactation woman employees shall have two additional rest periods of half an hour each, during which they may nurse their children, but this time shall not be deducted from their pay.

Hours of Labor and of Rest

NO WAGE earner or salaried employee shall work for more than nine hours a day in the enterprises or establishments subject to this law.

Work which requires overtime shall be performed by additional employees or workmen other than those who have worked for nine hours. Every agreement which stipulates a longer workday is void.

The provisions of this article shall not prevent workers who are employed by the job or by the piece from devoting more than nine hours daily to the work assigned to them, if they so desire, but they shall not be required to perform in one day work which normally requires more than nine hours' work to complete.

The hours of labor in the interior of mines shall be governed as follows: In the interior of mines the working-day shall not exceed 8 hours and shall be divided into 3 shifts of 8 hours each, or 4 shifts of 6 hours each, according to circumstances. The hours for entering and leaving shall be fixed by the regulations governing mining enterprises. In each shift a sufficient number of miners, foremen, and superintendents shall be employed.

No work of any kind shall be performed by the enterprises or establishments affected by this law on Sundays, New Year's Day, Holy Thursday, Good Friday, the days specified by law as national holidays, and those which, upon the date this law takes effect, have been declared as holidays by the States or municipalities within their respective territory or jurisdiction. The Federal executive shall determine the industries which shall be exempt from this provision.

Settlement of Labor Disputes

THE governors of the States, the Federal district, or Federal territories shall act as arbitrators to settle differences as regards working-days, maximum duration thereof, workmen's compensation, and wages, provided that such disputes are voluntarily submitted to them by the employers or workers and when a shutdown of one or more industries is anticipated.

The decision of the arbitrator may be appealed by either of the parties to the Minister of Interior Relations, whose decision shall be final. If the parties fail to agree to submit the question to arbitration either one has a right to appeal to the courts.

Employers and Workers Organizations

ORGANIZATIONS of employers and workers shall not affiliate with foreign organizations nor shall they send delegates to international congresses without the previous consent of the Federal executive. Violation of this regulation entails the dissolution of the offending association and the imposition of fines of from 100 to 1,000 bolivars on their directors. The same penalty will be imposed upon associations spreading communistic propaganda or upon those which engage in any movement against public order or good conduct.

General Provisions

NO ONE shall be forcibly required to work against his will. Work shall be performed under conditions which permit the normal physical development of the wage earner; that allow sufficient time for rest, education, and proper recreation; that lend full protection to the health and life of the laborer against accidents and occupational diseases; and that place women and children under protection against influences prejudicial to morality and good habits.

The Federal Executive, through the Ministry of Interior Relations, is charged with the enforcement of the provisions of this law and its regulative decree.

HOUSING

Financing the Home

HUNDREDS of thousands of families who set out to own their homes each year find financing the most trying problem they have to surmount, according to the division of building and housing of the Department of Commerce, which has just issued a booklet entitled "Present Home Financing Methods." This booklet, which has been prepared with the cooperation of leading home-financing agencies, is written to assist home buyers and home builders who have to borrow, and also for persons and organizations who are interested in improving local home-financing facilities.

Choosing a helpful home-financing agency and a good plan of financing may save a family from much unnecessary expense, or even determine the success of the undertaking. In order to avoid costly mistakes a family, particularly if it has to borrow more than can be obtained on a first mortgage, needs to know something about the sources of home loans, and the types of services furnished by the agencies supplying them. The report under review describes the services rendered by building and loan associations, life insurance companies, savings banks, trust companies, and other agencies which lend to home seekers, and also takes up the question of second and third mortgages and the land-contract method of purchase. It points out various pitfalls to be avoided, and gives much practical information, such as suggestions for use in applying for loans.

The discussion of the second mortgage, a subject of vital interest to thousands of homeseekers, deals with the methods and practices of second-mortgage lenders, and the effect of discounts and commissions on the interest rate paid by the borrower. Since the borrower is usually required to curtail the loan periodically, and therefore, does not have the use of the whole amount for the entire loan period, the discount rates of 4 to 10 per cent a year, which are common in many localities, are actually considerably higher than these rates. In fact, under the usual regularly amortized loan the real discount rate is approximately double the nominal rate. On a typical second-mortgage loan, for example, running for three years on the monthly payment plan, and at a 7 per cent nominal interest rate and with a 15 per cent discount (5 per cent annually, so-called) the actual rate of interest paid by the borrower on his outstanding balances is approximately 18 per cent a year.

The appendix of the booklet explains in simple terms how answers to similar problems may be found by prospective borrowers who wish to compare different loan plans available to them.

In many communities the high rates charged for second mortgage funds have tended to discourage home building, but instances are given of successful efforts by public-spirited local groups to improve such conditions. The pamphlet is designed to cover the subject more fully than was possible in a previous report entitled "How to Own Your Home," a publication which had a sale of more than 350,000 copies and which was issued several years ago by the Department of Commerce as part of its program to promote home ownership and to encourage voluntary local efforts to safeguard the interests of families who build or buy their homes.

COOPERATION

Congress of Consumers' Cooperative Societies, 1928

THE Sixth Congress of the Consumers' Cooperative Societies affiliated to the Cooperative League of the United States was held in Waukegan, Ill., October 29-31, 1928. Eighty-six voting delegates were present representing 97 societies, in addition to a number of fraternal delegates from labor organizations and others interested in the consumers' cooperative movement.

Greetings were received from the International Cooperative Alliance, the International Women's Guild, and one or more of the central cooperative organizations in each of the following countries: Belgium, Czechoslovakia, Denmark, England, Estonia, Finland, France, Germany, Hungary, Iceland, Latvia, Lithuania, Netherlands, Norway, Poland, Russia, Scotland, Sweden, Switzerland, and Ukrania. Representatives were present from the New York branch of the Russian Central Cooperative Union (Centrosoyus) and the Cooperative Union of Canada, who spoke on cooperation in their respective countries.

Dr. James P. Warbasse, president of the Cooperative League, which is the national organization of the consumers' cooperative societies in the United States, reviewed the accomplishments of the league since its establishment 10 years ago. He pointed out that cooperators have added to their knowledge a vast store of facts gleaned from their experience of the past decade. They are showing an increasing tendency to deal with hard facts. The outstanding problem, however, is to engage the thought and efforts of the members in the work of the society. An "aristocracy of service" is being developed in the movement, composed of experts in their respective lines. Such a development should be encouraged, and a special effort should be made to bring superior people into the movement. But the movement should also find a way to use each member in the service of the society. He mentioned one society of 150 members, each of whom is doing a special service for the organization. There are committees for such activities as health, beautification, restaurant, music, etc., and the new member may choose on which committee he will serve, but he must serve on one.

Development of Consumers' Cooperatives in the United States

THE report of the executive secretary of the Cooperative League showed that at the end of 1927 there were in affiliation with the league 155 societies having a combined membership of 77,826. (There were also 722 individual members of the league not members of any local society, and 13 fraternal members.) Excluding credit, insurance,

and banking organizations, these societies did a business of \$13,765,444 during the year.

There are three district educational bodies—for the Northern States, the Central States, and the Eastern States. In sections where a district league exists the local societies affiliate with the national league through the district organization, but where there is no such district organization, the local societies affiliate directly with the national league.

North Central States.—The territory of the Northern States Cooperative League includes the States of Minnesota, North and South Dakota, Wisconsin, and Michigan. At the end of June, 1928, there were 96 societies in membership with the league, having a constituent membership of approximately 54,800 members. During the year no member society went out of existence, but four new societies were added.

Mr. H. I. Nordby, president of the Franklin Cooperative Creamery Association of Minneapolis, reporting for the league, said the league has had to overcome an adverse public feeling which arose largely from the failure of a promoted society in Minneapolis in which many working people lost money. In spite of this the league has been making progress, and has just issued its fourth yearbook. It has conducted four training courses for cooperative employees. It also maintains an auditing service, and has done some service in marketing potatoes for affiliated societies.

The Cooperative Central Exchange, which is the wholesale for the district, has a membership of 76 local societies and annual sales of about one and a quarter million dollars. It also maintains an educational department, training school, and auditing service.

One of the interesting developments in cooperation in Minnesota is the growth of the cooperative oil associations. There are now about 60 such associations with more than 10,000 members. Some 30 of these now have their own central organization, which was represented at the congress.

The delegate from the Cloquet (Minn.) Cooperative Society reported that his society, located in a town of about 5,000 population, does a business of nearly \$600,000 per year.

The Franklin Cooperative Creamery Association of Minneapolis, the largest local consumers' cooperative society in the United States, doing a business of about \$3,500,000 a year, is devoting its energies now not so much in increasing its business as in endeavoring to increase the knowledge of the principles of cooperation among the members.

Central States.—Dr. George Kennedy of the Villa Grove (Ill.) Cooperative Society, reporting for the Central States Cooperative League, covering Illinois, Indiana, and Ohio, stated that Illinois is still suffering from the effects of two "overdoses of enthusiasm" in cooperation. Very adverse conditions have confronted the league. It was organized shortly after the dissolution of the Central States Cooperative Wholesale, and had to contend with the ill will engendered by that failure. Also the economic condition of the coal fields where most of the societies of the State are located has hindered its development. There were some 200 cooperative societies in Illinois in 1918, according to the speaker, but by 1926 only about 25

of these remained. Fourteen of these are members of the league; they range in size from 33 to 1,400 members and the annual business done by them ranges from \$1,600 to \$750,000.

Lack of funds and the continuance of the coal strike has prevented organization work by the league in Indiana and Ohio.

The league maintains for its members an addressograph and multi-graph service, poster service, and speakers' bureau. It has been carrying on a campaign for greater educational work by local societies and against credit trading. Some joint buying is being carried on in such staples as coffee, tea, condiments, etc., under the cooperative label.

The delegate from the Bloomington society reported that the majority of members in that society are railroad men. The society, however, faces difficulties because the main business of the railroad on which they are employed is hauling coal, and the strike in the coal fields has cut down its business. Delegates from other societies in the Central States—Mt. Olive, Villa Grove, Gary, etc.—reported a slackened business due also to the condition of the coal fields. Flourishing businesses were, however, reported by the Waukegan Cooperative Trading Co. and the Waukegan and Northern Chicago Cooperative Association. The former reported a business in 1927 of about \$580,000.

Eastern States.—During the past year, according to Mr. Cedric Long, secretary of the Eastern States League (whose field includes the States of Massachusetts, Connecticut, New York, and New Jersey), the membership of the league has risen from 15 societies to 29 societies with some 16,000 members.

The league is engaged mainly in educational work, having held a training school and several week-end conferences. It is working on a course of lectures on cooperation which it is offering to schools and colleges, and is considering the holding of an evening cooperative training school this coming winter.

Joint buying, which was started nearly three years ago, is increasing rapidly and some commodities are now being sold under the league's label. Plans are being matured for a wholesale society to serve the societies in the district, but a satisfactory manager has not yet been found.

The conditions in the textile industry of New England have adversely affected some of the cooperative societies of the section. The manager of the United Cooperative Society of Fitchburg, Mass., reported that upon the sale and subsequent moving away of one of the textile mills of the town, the store lost some 300 of its members who had been employed in the mill but had to leave town to seek work elsewhere. Thus within a year the membership of the society dropped from 800 to about 500.

Pacific coast.—The delegate from the Los Angeles Consumers' League Cooperative Bakery reported that, in his opinion, the outlook for cooperation is very favorable in Los Angeles, and he favored educational work among California societies with a view to forming a Pacific cooperative league.

The Los Angeles bakery was started 15 years ago. After a rather unsuccessful experience in a poor location, the bakery was moved into a new building where it began to prosper. According to the delegate,

the bakery is now worth about \$100,000 and has 300 members. Its building has become a cooperative center in which some 35 organizations are housed. It is planning to open a cooperative restaurant.

Question of Cooperative Insurance

THE fifth cooperative congress, held at Minneapolis in 1926, appointed a committee to investigate the question of cooperative life and fire insurance, with a view to the desirability of (1) establishing a new organization for the purpose, or (2) of making use of some society already established.

The report of this committee was presented by Mr. E. E. Branch, of the New Era Life Association. Study of the question convinced the committee of the impracticability of starting a new organization, and it therefore examined the existing insurance societies to ascertain their fitness for the purpose in mind. Two organizations were found—one, the New Era Life Association, which has been writing life insurance for 30 years and now has some 31,000 policyholders; and the other, the Workmen's Furniture Fire Insurance Society, which has been in business for 50 years, but which writes insurance only on furniture. Both of these were found to be in good financial condition and essentially cooperative in character. Legal disabilities under which both are operating made the congress hesitate in the matter of giving official indorsement, but a motion was finally passed recognizing the New Era Life Association as the official national cooperative life insurance organization, provided the company reorganizes on a legal reserve basis, maintains or improves its present democratic character, and provides for distribution of surplus in dividends proportioned to the amount of the policy. It was specifically stated that this does not bar the formation of any other insurance association which does not compete with the New Era Association. The subject of fire insurance was referred to the standing insurance committee with power to enter into relations with the Workmen's Furniture Fire Insurance Society when it can comply with the necessary conditions.

Problem of Spreading Cooperation

DISCUSSION of the ways in which the field of cooperation can be extended was opened by Mr. L. S. Herron, editor of the Nebraska Union Farmer. Approaching the problem in the light of the difficulties encountered and the measures taken in Nebraska, he pointed out that the cooperative movement in that State is largely one of farmers. The farmers' elevators, for instance, have had to overcome the handicap of absentee ownership of the cooperative enterprise presented as the stockholder-members gradually retire from active farming but nevertheless retain their shares in the cooperative; this tendency away from the cooperative form and toward the joint-stock form of enterprise has been hard to overcome. Other difficulties are lack of joint action and coordination of activities.

In Mr. Herron's opinion the cooperative store is a very valuable form of cooperation and should not be given up. It should be developed until the group of stores is large enough and compact enough to have its own wholesale. The distance between stores is a vital

point here; the wholesale must be nearer to its members than was necessary a few years ago, and the tendency now is toward the use of trucks instead of local freight trains. There is also the question of the establishment of branch stores. The farmers' wholesale, the Nebraska Farmers' Union State Exchange, has established nine branch stores in various sections of the State. The local people own shares in the wholesale but have no stock in these stores which are run by the wholesale itself. These stores were established to give regular standing to a joint buying scheme of the Farmers' Union locals. Mr. Herron does not regard them as a success from the cooperative point of view.

The development of cooperation in territories where no cooperative store as yet exists, and the greater use of technicians in the movement were other means of extension suggested.

In connection with the question of the development of new territory, Mr. George Halonen, educational director of the Cooperative Central Exchange at Superior, Wis., stressed the importance of preliminary educational work in new districts before starting a new society.

Mr. Liukku, of the Waukegan Cooperative Trading Co., stated that his society had established a branch store, not as a result of a demand from the people but purely as a business proposition. He was of the opinion that, for a large society which can afford to risk the loss of a few thousand dollars, this is a perfectly legitimate way to advance cooperation.

Mr. E. G. Cort, manager of the Minnesota Co-op. Oil Co., drew attention to the fact that in some States cooperative societies are laboring under certain legal handicaps which must be removed before the cooperative movement can expand as it should. Thus, in South Dakota the stock of a cooperative society carries double liability, while in Iowa shares in a cooperative can not be purchased in installments by applying the dividends on purchases but must be paid for in cash.

Mr. George Keen, secretary of the Cooperative Union of Canada, was of the opinion that the board of directors of a cooperative society should have business experience, so that they would be able to recognize at once if a mistake had been made, for instance, in the selection of a manager. He favored the establishment of branches of a society already in operation rather than the setting up of a new society, because of the greater buying power of a large society.

Training of Cooperative Employees

BEFORE the Cooperative Central Exchange began its courses, the clerks and managers in the cooperative stores were mainly men who had been dismissed by private merchants, according to Mr. H. V. Nurmi, auditor for the Exchange, and one of the instructors in its training school. The managers had had little training in accounting and usually each new manager had his own system of bookkeeping, so that anything like a continuous record of a society was impossible. This is being changed as a result of the intensive training now being given in the Exchange school, and there is much interest manifested. There are always more applicants for the courses than can be efficiently accommodated. The value of cooperative training is recognized by the stores, and the graduates have no difficulty in obtaining

positions in the movement. Many stores have established scholarships defraying the expenses of one or more students at the school.

Mr. Nurmi stated that nearly 400 students have been trained in cooperative schools in all sections of the country. He was of the opinion that the next step should be the cooperative training of the directors and members.

Mr. V. S. Alanne, educational director of the Northern States Cooperative League, spoke of the training schools held by the league during the seven years of its existence. One of the greatest problems faced in these training schools—and one not yet solved satisfactorily—is that of devising a course which will take into account all the varied previous training of the students. Those who attend the courses include among their number some with only grammar-school training, others who have had some or all high-school work, and some who have had university training. Besides the societies which are members of the Cooperative Central Exchange (which has its own training school), there are only five store societies which are members of the league; all the other affiliated societies are creameries, insurance associations, credit associations, oil associations, etc., whose educational needs are different from those of the store societies. This difficulty may be met by holding two sorts of classes—one for the stores and one for the Franklin Cooperative Creamery.

Mr. L. S. Herron, editor of the Nebraska Union Farmer, stated that the Farmers' Union in that State had expected to hold its first training school in October of this year, but was unable to obtain Mr. Nurmi's services because of pressure of work. It expects, however, to hold the school early in the spring of 1929.

Problem of Credit

THE dangers to the cooperative store from the extension of credit were emphasized by Mr. Warinner, secretary of the Central States Cooperative League. Practically all of the societies in Illinois which have failed, he stated, have done so because of giving credit. Cooperative stores have felt that because their competitors, the private stores, gave credit, they must do it also. The anticredit campaign of the league has shown that it is not necessary, that a cooperative store, even in a community where credit has always been given, can be put on a strictly cash basis provided sufficient preliminary work is done to show the membership the ill effects of credit upon the store. He was of the opinion that the only solution of the problem of credit is cash trading.

Doctor Warbasse, president of the National Cooperative League, urged that the members of the cooperative society be encouraged to build up a reserve against the need of credit. This could be done by establishing a credit union among the members of the society. It is important, however, that the members learn that somebody has to pay for the goods consumed.

Mr. Nurmi, of the Cooperative Central Exchange, stated that after the war many of the stores in the Central Exchange district were facing bankruptcy because of credit and overstocking. It was impossible to put them on a cash basis immediately. Educational work among the members had to be done first. They had always been used to receiving credit and expected it. The farmer members also had to

have credit for machinery. Many stores, however, passed resolutions providing for a transition period of from five to seven months before introducing the cash-sales system, and now about 60 per cent of the local societies which are members of the Exchange are running their stores on a cash basis. The rural stores are not having much difficulty because the farmer members are now receiving cash for their cream and are therefore able to make their purchases from the cooperative store for cash. The city stores, however, have the problem of decreased purchasing power and lack of ready money of their unemployed members.

Mr. Eskel Ronn, general manager of the Cooperative Central Exchange, said he had never seen a successful attempt to limit credit. Experience has shown that the sales of the store generally increase after the cash policy is adopted. If the cash policy fails, it is usually due to insufficient educational work among the members beforehand. He favored a definite national cooperative policy against credit trading.

Chain-Store Competition

THE manager of the United Cooperative Society of Fitchburg, Mass., Mr. K. E. Grandahl, stated that chain-store competition is very keen in the East. Fitchburg has 16 chain stores. Almost every variety of chain store has been located in the vicinity of the cooperative store, most of which have lasted only about 6 months, though one held out for a year and a half. To withstand chain-store competition members who are loyal to the cooperative store and well grounded in cooperative principles are necessary.

The fundamental principle of the chain store is price appeal. One of their features is the offering, as "leaders," of some 20 nationally known brands at a price only a little above cost, or in some cases even below cost, trusting to make up this loss by the profit on the customer's other purchases. The Fitchburg society adopted a plan which Mr. Grandahl admitted was not without an element of danger to the cooperative store: Members always took advantage of the opportunity to purchase the "leaders" at the chain store, but bought all their other articles from their own store.

The great advantage of the cooperative store over the chain store, in his opinion, is the lack of community relations of the latter. Personal reasons and fraternal and religious affiliations often account for the patronage of some of the customers of the private merchant. The chain store, however, is driving the small private grocery dealer out of business and the chain store does not possess these ties with the purchasers. The manager of the chain store is generally not a long resident of the community, with church, fraternal, or other bonds with his neighbors and friends, but a man sent in from outside.

Mr. Oscar Corgan, president of the Cooperative Central Exchange, pointed out that even with the extra expense entailed in the delivery and other service extended in cooperative stores, the latter in the Northern States district nevertheless have a lower operating expense than the chain stores. Quality of goods offered is an advantage held by the cooperative store. This can be insured by the selling of goods tested for quality under the cooperative label. Whereas the chain-store organization buys the whole output of a factory or cannery, mixing all grades in the same can or package, the cooperative

store buys only goods of the highest quality for sale under its own label. Thus the cooperative label is assurance to the purchaser that what he is buying is the best. Mr. Corgan said that the use of cooperative-label goods has been one of the greatest factors for success in the Exchange societies.

Other Questions

A DETERMINED effort had been made in the fifth convention of the league to commit the league to political action. This is a question which has arisen in the cooperative movement of probably every country. Not content with the gradual progress of cooperation as a purely economic movement, there are always those who feel that progress will be greater if the movement works also through the medium of politics. The question aroused much discussion at the fifth congress, and shortly afterwards two local societies initiated a referendum to all member societies of the league to the end that all controversial subjects, such as politics or religion, be excluded from the agenda of future congresses of the league. It was reported to the sixth congress that this resolution had been carried by a vote of 209 to 41, and the league, therefore, will continue its purely economic activities.

It was decided that hereafter a national yearbook should be published, the Northern States Cooperative League having voted in its recent convention to forego the publication of its own yearbook and to give its financial support to a national publication although retaining for three years the editorship of the national yearbook.

The board of directors of the cooperative league was instructed to appoint a committee to study the question of the establishment of a cooperative newspaper and to report to the next congress.

Relations Between Farmers' Marketing Cooperatives and Consumers' Cooperatives

By L. S. HERRON, EDITOR, NEBRASKA UNION FARMER ¹

STUDY of existing and past relations between farmers' cooperative marketing associations and consumers' cooperatives demonstrates that in order for these relations to be successful both cooperatives must be well-established and responsible groups able to deal with each other in dependable wholesale quantities. Two examples will serve for illustration:

The first example is the relation between the Twin City Milk Producers' Association, composed of farmers and dairymen tributary to St. Paul and Minneapolis, Minn., and the Franklin Co-Operative Creamery Association of Minneapolis, a cooperative group of consumers. In this case, the farmers and dairymen are organized to sell their milk cooperatively without the intervention of any private-profit agencies between the farms and the wholesale buyers in the cities; while the Franklin creamery takes the milk directly from the farmers' organization, bottles it, and distributes it to the consumers,

¹ Paper read at 6th congress of The Cooperative League, Waukegan, Ill., Oct. 30, 1928.

also without intervention of private-profit agencies. The price of milk is determined from month to month by a definite formula that relates it to the prices of butter and cheese. Since the prices of butter and cheese are determined by supply and demand in the markets of the country, and even the world, this method obviates arbitrary local standards and leaves little room for quibbling on either side.

The other illustration is the relation between the Canadian Wheat Pool and the English and Scottish Wholesale Societies. The pool sells wheat in Europe through its own agents, retaining ownership of the grain all the way to Europe. This eliminates speculators' profits and needless tolls. The wholesale societies have immense mills. They grind wheat and distribute the flour to consumers through cooperative channels. Thus when the wholesale societies buy wheat from the pool, private profit, excepting in transportation and transfer charges, is eliminated along the entire route from farms to consumers. The price of wheat in these transactions is the regular trade price, determined by the world markets. There appears to be no disposition on the part of the wholesale societies to expect to buy their wheat cheaper from the pool than elsewhere, or on the part of the pool to get a higher price from the wholesale societies.

Dependability and Businesslike Methods Essential

IN GIVING these illustrations we do not mean to imply that magnitude is the chief factor in successful relations between farmer groups and consumer groups. Rather, the purpose of the illustrations is to show that the transactions must be between well-established and financially responsible groups handling products in dependable wholesale quantities.

Relations of this kind between farmers' cooperative marketing organizations and consumers' cooperatives in the United States are limited by the lack of integrated consumer cooperatives. Such consumer groups could now be buying butter, cheese, other milk products, eggs, dressed poultry, dried fruits, nuts, honey, maple products, fruits, and vegetables from farmers' cooperatives; and at any time they had their own mills and slaughterhouses they could buy wheat and meat animals from farmer groups. Regional wholesale societies federated on a national basis would greatly facilitate such transactions.

Most of the attempts thus far made in this country to establish direct dealings between farmer groups and consumer groups have been temporary and sporadic, and on the whole not very satisfactory. This has been due, we believe, to the fact that the groups were not organized to buy and sell in a sound, businesslike way. Thus there have arisen difficulties in regards to prices, grades, and payments.

Too often, instead of buying and selling at established market prices, consumer groups have expected to buy for less and producer groups have expected to receive more. Cooperatives organized to sell and buy in a businesslike wholesale way soon get over such amateurish notions.

In dealing with small groups of producers consumers have not always received products of dependable quality. And producers in dealing with loosely organized groups of consumers have taken a financial risk. Farmers who have their year's work tied up in their

products do not relish the idea of turning them over to consumer groups that have no capital to pay for them until the products have been peddled out.

Successful and satisfactory relations between producer groups and consumer groups can not exist with any such loose arrangements. Each side should be soundly and thoroughly organized to take care of all the steps in marketing on its own side of the meeting point. The consumers' group must have financial responsibility, and the producers' group must supply products of dependable quality.

In outlining this relation between producers and consumers based on sound business principles we are not unmindful of the need of a sympathetic spiritual relation between the two. Farmers need to study and understand consumers' cooperation, and consumers need to study and understand farmers' cooperative marketing. Each should know the problems and aspirations of the other. A thorough understanding of cooperation and its aims would overcome in producers' cooperatives the tendency to consider themselves simply a part of the present profit system, striving for a place in the sun of capitalistic business. Likewise a thorough understanding of the farmers' situation would remove from the minds of consumers the notion that farmers' marketing organizations operate to increase the cost of food. Experience has amply demonstrated that farmers can not form a trust; there are too many of them, the range of substitutes for their products is too wide, and they can not control output. When consumers learn this, they will cease to view farmers' marketing organizations with suspicion.

Interchange of Ideas

THIS mutual understanding can be worked out gradually, we believe, through consumers and farmers meeting in such congresses as this, by representatives of consumers' cooperatives attending and addressing farmers' meetings, and vice versa, and by the freest interchange of literature and ideas between the two groups.

All this will tend to humanize the relations between consumers' and producers' cooperatives and create a bond of sympathy between them that will lead and inspire them to support each other against the onslaughts of profit-seeking business.

Federal Trade Commission Report on Cooperative Marketing

IN RESPONSE to a Senate resolution approved March 17, 1925, the Federal Trade Commission undertook a study of cooperative marketing associations to ascertain the costs of cooperative marketing as compared with other types of distribution and to determine whether and to what extent such organizations are hindered in their business by interference or obstruction from private distributors. The report on this study has recently been published by the commission.¹

¹ Federal Trade Commission. Cooperative Marketing. Report in response to S. Res. No. 34, Sixty-ninth Congress, special session. Washington, 1928.

Relative Importance of Central Cooperative Organizations

THE report takes up in turn the large-scale organizations handling specified commodities—such as butter, liquid milk, grain, fruit, livestock, etc.—traces their development, and evaluates the importance of each in its own field.

In some cases the cooperative organizations play no mean part in the distribution of the product of their field. Thus, in Minnesota, the leading butter State, the cooperative creameries produce nearly 70 per cent of all the butter made in the State, and some 30 per cent of the total production is marketed by the Land O'Lakes Creameries, a cooperative organization. The sales of that organization amount to nearly \$40,000,000 annually. The California Fruit Growers' Exchange handles annually from 70 to 75 per cent of the whole citrus-fruit crop of the State and its sales total about \$70,000,000 per year; while the Florida Citrus Exchange handles from 25 to 30 per cent of the crop in that State. Throughout the citrus-fruit producing area, as a whole, cooperative agencies handle on an average more than 60 per cent of the total crop. The cooperative livestock commission agencies handle more than 10 per cent of all the animals sold in livestock markets in the United States and nearly 15 per cent of the stock in the markets in which they operate.

The Poultry Producers of Central California and the Washington Cooperative Egg and Poultry Association together handle more than three-fourths of the business in this field on the Pacific Coast, and in Missouri nearly 20 per cent of the eggs marketed in the State are handled by nine cooperative associations. Cooperation has made comparatively little progress in the marketing of wool and cotton. In the marketing of cotton the proportion of the total State production sold through cooperative channels in 1925 ranged from 4 per cent in California to more than 10 per cent in Arizona, Oklahoma, and South Carolina, and to some 15 per cent in Mississippi, New Mexico, and North Carolina, while in 1925 and 1926 the wool cooperative associations handled about 10 per cent of the total clip. More than 80 per cent of the total production of commercial walnuts in California (which produces practically all of this crop) is marketed by the California Walnut Growers' Association, while the California Almond Growers' Exchange handles from 65 to more than 70 per cent of the almond crop of the State.

Hindrances Encountered by Cooperative Organizations

IN THE opinion of the investigators the obstacles to the success of cooperative marketing organizations come from two sources: (1) The independent competitor, who fears that the new system of marketing will reduce his profits or supplant his business entirely; and (2) dissension and strife within the association.

Outside interference.—The investigation showed that, on the whole, independent buyers and dealers have been very fair, their opposition being merely that of keen competition, forcing the cooperatives to become very efficient, if they would hold their own and demonstrate the soundness of the principles underlying the cooperative marketing of farm products.

In some instances, however, "rivalry has gone too far, resulting in the using of unfair tactics to injure cooperative associations." The report points out that "as a rule such opposition is not aimed at the cooperative movement as a whole, but directed against individual organizations." Neither is the opposition concerted, being largely confined to actions by individual persons or firms. Some cooperative associations reported that they had reason to believe that dealers were in collusion against them, but this was a charge actual proof of which is difficult to obtain.

Of 3,994 cooperative associations from which reports on this point were received, more than 68 per cent reported no interference or opposition, 20 per cent reported that the annoyances were trivial, "mere competition," and "nothing to complain about." About 12 per cent stated that the interference experienced by them was sufficient to cause them concern and sometimes embarrassment; of those making such reports, some 70 per cent were engaged in the marketing of livestock, grain, or dairy products.

"As a general rule the returns to the farmer for his products have increased materially in localities where cooperative marketing associations function. In order for the independent operator to hold his own he is forced to meet association prices. He may even outbid the association, but so long as he operates fairly such conduct may be classed as keen competition." Such competition may, however, hamper the association (1) by keeping nonmember farmers satisfied, since they receive the same price as the members without having to pay any of the expenses of the association, and (2) by making members dissatisfied because of the extra expense involved in belonging to the association, "when they can get (as they believe) the same results on the outside." It is often only when competitive prices fall after the association has been forced out of business that the influence the association had in keeping the prices up is realized.

Some of the unfair methods resorted to include the following:

1. Unfair price competition. Sometimes higher prices than those paid by the association will be offered by the private buyer, and these not always in good faith—for he knows that acceptance of his offer will be a violation of the member's contract with the association—but for the purpose of creating dissatisfaction with the prices offered by the association.

2. Manipulation of grades or quality. In order to induce violation of contract the buyer may manipulate the grading tests so that the farmer's product gets a higher rating than it deserves.

3. Circulation of false rumors that the association is failing, that the manager is dishonest, etc., or criticism of its methods for the purpose of affecting the association's reputation. In some cases where such statements have been printed, the association, by either bringing suit or threatening to, has forced public retraction by the offender. Usually, however, such false statements are not printed but take the form of rumors spread confidentially, and these are much more difficult to fight.

4. Boycotts, usually directed toward farmers' supply organizations, retail stores, livestock commission exchanges, and tobacco cooperatives. The usual method is simply a refusal by the wholesaler to sell the cooperative association needed supplies; he may even ignore its

orders altogether. Many times, however, when the cooperative association becomes large enough to make its orders of important size, this opposition disappears and there may even be keen competition by manufacturers and supply houses to get its business.

5. Direct solicitation of business, offering protection, to members who will resign from the association, from any suit for violation of contract.

A few associations make a practice simply of ignoring outside opposition. The majority, however, try to counteract the influence that such outside interference may have upon the members. The chief of the methods adopted is that of maintaining a close contact between the association and the members, keeping the latter thoroughly informed of the association's activities, and arousing in them a feeling of proprietary interest.

In a few instances the State laws incorporate a penal provision directed against persons spreading false reports or endeavoring to induce breach of the cooperative contract. While few associations are financially able to take such cases into court, it is reported that the mere presence of such a provision in the law has a deterrent effect upon private agents.

Internal difficulties.—The most serious obstacle to the success of the cooperative association, in the opinion of the investigators, is that arising from dissatisfaction or jealousies from within the organization. Internal dissension, "regardless of whether such controversy is justified or not," paralyzes the activities of the association, demoralizes the membership, and results in loss of confidence all around.

Another internal difficulty experienced by the smaller cooperative units is the troublesome member—generally a small producer, with little at stake, who "assumes an important rôle in discussing association affairs and most often advocates impractical plans and procedure." Two associations have met this problem by restricting membership.

Conclusions

As regards the whole question of the problems faced by cooperative associations the report concludes, in part, as follows:

In view of the large number of cooperative organizations to which questionnaires were sent and the proportion answering the same, very few cases were developed in which it appeared that outside interests have interfered or were interfering with their successful operation.

In some cases, especially among grain and tobacco growers, livestock raisers, and cooperative creameries, there were indications of collusive effort on the part of independent or private operators to interfere with the successful operation of producers' marketing organizations. In such cases special investigation was made, but no evidence was developed to show that anything was being done that would amount to a violation of the antitrust laws. It was found, however, that in some quarters there was some opposition to cooperative marketing. This opposition, as would naturally be expected, was and is confined primarily to private dealers and concerns whose business has been affected through the operation of cooperative enterprises. While the ethics of some practices might be questioned, in the final analysis they resolved themselves into competitive methods, generally considered fair by cooperatives, and which they must meet in the ordinary course of business.

Probably the most serious interferences are the boycotts conducted in certain livestock markets by the members of the livestock exchanges operating thereon. On these markets the independent operators refuse to either buy from or sell to the cooperative marketing agencies. In some instances such boycotts relate

only to certain kinds of livestock and in others they are general. These are matters, however, falling within the jurisdiction of the United States Department of Agriculture in its administration of the packers and stockyards act. The information developed by this inquiry indicates that these boycotts have sometimes caused serious damage to cooperative livestock marketers before the situation has been brought under control.

With one or two exceptions, most of the instances of interference with or obstruction to the operation of cooperative organizations are past history, except where matters complained of are no more than keen competition. In the instances where the allegations of interference show some indications of such a nature as to be a violation of the law against unfair competition sufficient evidence to sustain the charges was not adduced.

It is concluded, on the basis of the developments brought about by this inquiry, as they relate to that phase of the investigation relating to interferences with and obstructions to the progress of cooperative enterprises, that existing Federal laws afford such organizations ample protection in all cases where jurisdiction exists. The antitrust laws, including the Federal Trade Commission act, affords such organizations a remedy for relief against combinations in restraint of trade and unfair methods of competition on the part of competitors.

Value of Cooperative Organization

PART II of the report consists of an examination into the costs, methods, etc., of marketing in order to ascertain the relative merits of cooperatives as compared with private distributors. Certain outstanding organizations were closely examined on this point. As regards some of these, the report remarks as follows:

The existence of a persistently successful cooperative marketing organization like the Eastern Shore of Virginia Produce Exchange constitutes in itself convincing proof that cooperative marketing can be carried on successfully if managed by leaders who are qualified with marketing experience and knowledge of marketing technique and who have education, vision, leadership, and whole-hearted devotion to the success of the venture. This organization not only obtains higher prices, pays higher prices, and operates at less expense per unit than its present competitors, but it has stood the test of 28 seasons and has revolutionized the methods of distributing produce from the Eastern Shore Peninsula.

The Wisconsin Cheese Producers' Federation, although less successful in the matter of obtaining and paying higher prices for the produce handled, also contributes proof that a cooperative organization can operate at as low expense per unit as can noncooperative distributors, provided that it has sufficient volume and provided that the managers keep close watch upon unit expenses at all points and promptly check all tendencies toward waste. So does the milk distributing cooperative included in this study. So do the cooperative terminal livestock associations. So do the Florida citrus-fruit cooperatives in so far as their packing operations are concerned, and in some years and comparisons, in connection with their selling operations, exclusive of national advertising.

Unless the cooperative has something by which to distinguish its product, it can not hope to obtain better prices than its competitors. Trade names have, therefore, been adopted in many cases, such as "Sunkist" oranges, "Sun-Maid" raisins, "Land O'Lakes" butter, etc., and care is taken to insure a rigid standardization of high quality in the products sold under these names.

Other necessary factors in the success of the cooperative organization are qualities of leadership, knowledge of market conditions, adequate capital, and ability to "hang on" until it has overcome its initial handicap of lack of experience.

The big problem of a new cooperative, then, is to survive the initial period of relative disorganization and inefficiency, of relative ignorance on the part of the managers concerning the technique of distribution of their product and of the

arts of management, of lack of trade connections, and to establish itself. Adequate capital would greatly increase the chances of this survival and establishment, provided the enterprise were honestly and capably managed. The period of peril would be shortened if the managers came already experienced. The big problem resolves itself into constituent problems of how to obtain the adequate capital and the capable managers.

This section of the report presents the following conclusions:

In formulating any opinion or drawing any conclusions as to the relative merits of the cooperative-marketing system as compared with other types of marketers and distributors of farm products it must be remembered that the results obtained in the comparative studies in this report are colored by the varying conditions and circumstances under which the organizations may have operated. The studies as presented show that in some instances the economic benefits accruing to the producer are greater through cooperative marketing than through other types of distributors and vice versa. These results might be used as argument both for and against the application of the cooperative principle as applied to the marketing of farm products. The report as a whole, however, no doubt presents a true cross-section picture of the economic advantages of the cooperative-marketing movement in its present state of development in this country as compared with other types marketing farm products. * * *

In some cases the distributive process may be so efficiently effected that gains from cooperative effort may be insignificant; in others the entrance of cooperative-marketing organizations may awaken a slumbering trade resistance and create a competitive situation which in the final analysis shows very little or no advantage for the cooperative-marketing association over other types of distributors, the creation and maintenance of such a condition, however, being due to the existence of the cooperative. * * *

The study indicates, from the experience of those cooperative associations that have been operating over a period of years, that it is possible through the application of the cooperative principle to the marketing of some farm products to operate as economically and make as good or better return to producers for their product by this method as through the older-established types of marketing. The relative merits of the cooperative principle in the marketing of every farm product as compared with other types of distributors is not yet definitely determined because of the fact that it is largely in its infancy in the handling of some products.

With reference to the entire movement it might be said that producers are endeavoring to develop a system of marketing whereby they can improve their economic condition by securing a better return for their product. This inquiry seems to indicate that the progress made and the degree of success attained in the handling of any commodity seems to have been largely in proportion to the length of time the principle has been in actual practice, together with the support received from the producers themselves. The reason for this seems to be that it takes time to educate producers as to the value and benefits of cooperation and to develop an efficient marketing organization. A cooperative organization, like any other type of business if it is to succeed in competition with others, must be efficiently managed and operated and also must have the support of a sufficient number of producers supplying a sufficient volume of business to enable it to operate economically.

LABOR ORGANIZATIONS AND CONGRESSES

Convention of the Canadian Trades and Labor Congress, 1928

THE forty-fourth annual meeting of the Canadian Trades and Labor Congress was held at Toronto, September 10-14, 1928. The delegation in attendance was larger than in any year since 1921 and an increase of 4,000 in membership was reported since the last convention, the total paid-up average membership for the year at the time of the meeting being 119,243.

The following account of this important assembly is based on a report of the proceedings in the Canadian Congress Journal of October, 1928. Conspicuous among the subjects taken up in addresses were: Public ownership, development of hydroelectric power in Ontario, the effects of maintaining high wage levels upon the development of cities, and the immigration problem.

The report of the executive council, which included 15 sections, brought together valuable and varied information concerning labor activities in the past year, including a summary of Canadian labor legislation enacted and labor legislation requested, since the last convention, extracts and reports from committees and councils actively associated with the congress; a review of the work of the congress in connection with migration matters, and a résumé of the progress in a number of countries in the setting up of national economic councils as agencies for "exercising a direct influence in the shaping of labor and social legislation before it enters the stage of parliamentary discussion."

Recommendation of Committee on Constitution and Law

AS INDICATIVE of the desire of the congress to protect itself against disruptive influences, the following adopted recommendations of the committee on constitution and law may be cited:

That the incoming executive be instructed to revise Article II, section 1, affecting unions chartered by the congress in order that fuller protection of the membership against destructive and disloyal activities may be established and submit their recommendations to the next convention.

That the incoming executive be authorized to amend the form of credential so that it shall contain a clause to be signed by the elected delegates disassociating themselves with organizations whose policy is hostile or antagonistic to the general policy of the Trades and Labor Congress of Canada or the international unions affiliated thereto.

Among the resolutions passed by the congress were those on the following matters:

Civil service.—In support of a proposed amendment to the civil service law, which will authorize the Postmaster General to take up directly such questions as classification and the fixing of salaries for

letter carriers; backing the National Association of Marine Engineers in its efforts to have this class of employees included under the superannuation law, and the Federal office cleaners in their endeavors to obtain sick leave, holidays with pay, and salaries on a yearly basis.

Shipping and marine provisions.—Seven measures for the improvement of the conditions of marine workers were adopted.

Employment and unemployment.—Calling for the elimination of private employment offices; for unemployment insurance legislation; and for the enforcement of regulations compelling employers when advertising for help to make known the existence of labor disputes.

Industrial controversies.—In favor of legislation in Ontario and Quebec legalizing the Dominion industrial dispute act in regard to jurisdiction and in favor of legislation enabling civic and municipal employees to present their grievances for conciliation.

Old-age pensions.—For continued activity to secure the passage of the Federal provincial old-age pension provisions in Provinces which have not adopted them and for the inclusion of public-utility employees under the British Columbia old-age pension measure.

Minimum wages.—For the extension of minimum-wage legislation to Provinces which have no such legislation, for the inclusion under the Quebec act of women in all industrial and commercial establishments, for amendments to the Ontario law, in order to eliminate the present exemption of 20 per cent of the employees designated "slow and indifferent workers," and for the inclusion of male as well as female labor under minimum wage acts as has been done in British Columbia.

Hours of labor.—In favor of an 8-hour day, a 40-hour week, the amendment and better enforcement of legislation for one day's rest in seven and for at least two weeks' holiday with pay for all workers regularly employed.

Mothers' allowances and maternity benefits.—For the extension of mothers' allowances legislation to Provinces not having such laws and for the creation of a Federal commission to inquire into the existing maternity benefit systems in various countries with a view to instituting such benefits in Canada.

Workmen's compensation.—Calling for amendments to harmonize the Quebec compensation law with the compensation legislation in most of the other Canadian Provinces; for the inclusion under the provincial compensation laws of youths attending technical schools, for the compulsory reporting by physicians to the health department of the Provinces of every case of occupational disease in which the services of such physicians may be required.

Health and safety.—For the elimination of manufacture, for commercial uses, of clothing in homes; for regulations concerning the setting up and operation of machinery; for an investigation into the hazards to health in bronze welding; in favor of licensing barbers and inspecting sanitary conditions in barber shops; for the extension of the railroad block-signal system; and for the stripping and washing of the walls of houses before putting on new paper.

Miscellaneous.—For the organization of youths and female workers; for provision for the vocational training and general education of apprentices; indorsing the Ontario Workers' Educational Association; in favor of legislation fixing the capital of the Canadian National Railways; and for the weekly payment of wages.

Migration

MIGRATION problems were prominently before the congress, there being 12 resolutions regarding them. These measures were referred to a special committee, which recommended among other things "complete opposition to the importation of harvest labor from overseas."

Executive Council for Next Term

THE whole executive council of the congress was returned by acclamation, Tom Moore, of course, continuing to be president. St. John was chosen as the convention city for 1929.

WORKERS' EDUCATION AND TRAINING

Workers' Education Movement in the South

THE Southern Summer School for Women Workers in Industry, which was established last year, constitutes a significant addition to the several undertakings of this character in other sections of the country.

It is the purpose of the school to assist industrial women to realize the present position of woman wage earners in the South and to equip them to take up their particular responsibilities. The following details are taken from an article in the November, 1928, issue of the *American Teacher* (pp. 8-10) by Louise Leonard, the director of this educational project.

The first session of the southern summer school was held at Sweet Briar College, in Virginia, in 1927 and the second at Carolina New College, Burnsville, N. C., in 1928. Both sessions were under the auspices of an independent committee of southerners, most of them wage earners who had had some experience with workers' education—women from the silk mills and knitting mills, garment workers, and others, also the president of the American Federation of Teachers, who is a southern woman.

Students came in 1927 and 1928 from eight Southern States; from textile mills, including silk, cotton, rayon, came spinners, spoolers, and weavers; from cigarette factories, packers; from hosiery mills, loopers; from garment factories, button and buttonhole operatives, overall, coat, and shirt workers; from cigar factories, skilled cigar makers; from shoe factories, French "folders" and fancy stitchers; from glove factories, laundries, telephone offices, box factories, and men's clothing factories girls came also so that in a group of 25 students, all typical southern industries, were represented by girls from some of the largest plants in the South.

Courses

THE study courses, from economics to health education, were especially arranged for workers in industry. After taking up industrial history from before the invention of machinery the students "saw their jobs in a new light, as parts of a great modern industrial movement which is revolutionizing the South even as it has wrought changes in Europe, in New England, and of which beginnings are now evident in the Orient and darkest Africa."

Economics were taught in relation to the students' own jobs, labor problems were learned in terms of the students' own low wages, long hours, unemployment, and other drawbacks compared with the lot of workers in other localities.

The purpose of the English course was to aid girls, many of whom had been obliged to leave school too soon, to read with more intelligence, to write more clearly, and to make public speeches. The material for this course was also largely drawn from the students' labor experience. For instance, the subjects for public speeches included the following: "The mill village in which I live"; "The effect of low wages upon workers"; "Industrial democracy in the plant where I work."

One hour per day was allocated to physical education, emphasis being placed on exercises which "teach industrial women relaxation and muscular control." Supplemental talks were given on personal health habits, child care, and social hygiene. Furthermore, individual advice was given each girl as to proper diet and exercises in view of her particular job. Many of the students learned to swim and all took part in group singing, baseball, hikes, and other kinds of recreation.

As a supplement to the instruction in economics, A. J. Muste, dean of the Brookwood College faculty, gave a week's course covering the workers' position in different periods of history, present-day labor problems in the United States, and the structure and functions of the American Federation of Labor.

The southern summer school faculty is composed of teachers who have a broad knowledge of the subject matter they teach but also experience in educating workers.

All members of the school—students, tutors, teachers—attended most of the classes; discussion was free and the contribution of the student from her industrial life as enlightening to the group as that of the discussion leader who had spent more time studying theory. There were tutorial hours; individual conferences for each student about her written work; projects undertaken by a student or a committee of students working with faculty members. Thus the program was flexible, adjustable to needs of students as they appeared, and progressive educational methods were followed.

A Widening Influence

ONE week end in August, at the call of the president of the North Carolina Federation of Labor, a conference of labor men and women from three States was held at the southern summer school to consider the labor organization problems of the South. A. J. Muste led the discussion on "Workers' education as a tool in the hands of workers." At this conference many of the students for the first time were in direct touch with organized labor, as 75 per cent of them were not members of trade-unions. The students as well as the visiting trade-unionists found the conference mutually beneficial, and in a number of instances saw opportunities for cooperation in their own home towns.

Among those financially supporting the summer school are "interested organizations and individuals in local southern communities from which the students come as well as from other places where there is interest in the South and in workers' education." The coming year the school's director will travel in the Southern States and work with local committees to raise funds and secure additional students. Workers' classes will be offered as a means of following up the work begun at the summer school.

Training of Dining-Car Employees

TRAINING of dining-car employees (stewards, cooks, and waiters) is being given special attention by the Pennsylvania Railroad, according to a recent press release of the company announcing the establishment of the third training school for this class of employees. The first of the schools was set up at Columbus, Ohio, last year and the second several months ago at Chicago. The

success of these first two led to the establishment of the third at Long Island City, the eastern headquarters of the company's dining-car and commissary activities.

The schools are said to have been organized primarily to "give a thorough and rigid training to prospective dining-car employees and, at the same time, by regular periods of study and instruction, constantly to improve the work of those already in the service." Under the present arrangement employees go to school for an hour's instruction immediately after their return from road trips, the average employee spending approximately three hours a week in school. The training continues as long as the employee remains in the service.

Exact reproductions of the space and equipment of the latest type Pennsylvania Railroad dining car are built into and form a part of the commissary buildings at New York, Chicago, and Columbus, thus making possible the carrying on of demonstrations and classes under conditions that prevail in cooking and serving meals on the road. In the dining-car section of the schools an instructing waiter "possessing wide knowledge and long experience in the art of pleasing patrons" coaches the waiters in the proper methods of serving each item of the menu. "Courtesy, personal appearance, care of silver and linens, and kindred subjects are covered with equal thoroughness." As a part of the activities of the schools, expert chefs are "constantly engaged in developing new and improved dishes and food combinations and in testing the best recipes of famous hotels and restaurants to determine their adaptability to railroad dining cars."

The supervisors and instructors at the new Sunnyside Yard school at Long Island City are said to be men of wide and varied experience not only in railroad dining-car work but in the larger hotels and restaurants of Europe and America.

Plan to Establish Working Girls' Study Classes in Various Cities¹

STUDY classes or institutes for working girls in a number of cities are being planned by the standing committee on industrial problems of the National Council of Catholic Women.

In addition to the National Capital, representation on the committee will permit the organization of seminars in 11 cities: Birmingham, Chicago, Cleveland, Detroit, Kansas City (Mo.), Louisville, Milwaukee, Portland (Oreg.), Richmond, St. Louis, and York.

According to the present scheme of the committee these classes would extend over several months with probably a regular meeting once a week. It is proposed to have at least one prominent "authority on Catholic industrial teachings address each gathering." The students would be furnished with reading lists and guided in any outside reading and studying they may wish to take up.

A meeting for the inauguration of a working girls' seminar in Washington, D. C., for the study of industrial problems is scheduled for January, 1929.

¹ Press release of National Catholic Welfare Conference, Washington, D. C., Oct. 19, 1928.

TRAINING AND PLACEMENT OF HANDICAPPED WORKERS

Laws Governing State Commissions for the Blind

TWO more States were added, during the legislative year 1928, to the 21 States¹ which had already passed laws governing State commissions for the blind.

Mississippi (ch. 149) and Louisiana (ch. 101) have provided for permanent State commissions for the solution of the problems of the blind. Both laws provide for a body (called a commission in Mississippi, and a board in Louisiana), composed of five persons, one of whom shall be (at least by preference in Mississippi) a blind person. The members of the commission and board shall serve without pay but shall receive traveling and other necessary expenses incurred in the performance of their duties. The Louisiana act probably gives the greater powers to its board, as it defined the duties of its board to be:

1. To prepare and maintain a complete register of the blind of the State, which shall describe the condition, cause of blindness, capacity for education and industrial training, and such other facts as the board deems of value.
2. To assist in marketing of products of blind workers of the State.
3. To ameliorate the condition of the blind by promoting visits to them in their homes for the purpose of instruction and by such other lawful method as the board deems expedient.
4. To make inquiries concerning the causes of blindness, to ascertain what portion of such cases are preventable, and cooperate with the other organized agencies of the State in the adoption and enforcement of proper preventive measures.
5. To provide for suitable vocational training whenever the board shall deem it advisable and necessary. The board may establish workshops for the employment of the blind, paying suitable wages for work under such employment. The board may provide or pay for, during their training period, the temporary lodging and support of persons receiving vocational training. The board shall have authority as provided in this act to use any receipts or earnings that accrue from the operation of workshops.
6. To discourage begging, either directly or indirectly, on the part of the blind within the limits of the State.
7. To make a biannual [sic] report to the governor of its proceedings for each fiscal year.

The Mississippi act directs that its commission "shall maintain a bureau of information, the object of which shall be to aid the blind, whose training is not otherwise provided for, in finding employment, in developing home industries among the blind and in marketing their products. It shall in its discretion furnish materials, tools, and books

¹Colorado, Connecticut, Delaware, Illinois, Indiana, Iowa, Massachusetts, Minnesota, Missouri, Nebraska, New Hampshire, New Jersey, New York, Ohio, Oklahoma, Pennsylvania, Tennessee, Utah, Vermont, Virginia, and Wisconsin. See "Laws Governing State Commissions for the Blind," compiled June 1, 1927, by the Bureau of Research and Education, American Foundation for the Blind (Inc.), 125 East Forty-sixth Street, New York City.

for use as a means in rehabilitating such blind persons, and it may establish shops and workshops and, through the employment of teachers, give instruction to blind persons in their homes, provided that it shall not undertake the permanent support or maintenance of any blind person. The commission may also register cases of persons whose eyesight is seriously defective or who are likely to become visually handicapped or blind, and to take such measures, in cooperation with other authorities, as it may deem advisable for the prevention of blindness or conservation of eyesight, and in appropriate cases, for the education of children and for the vocational guidance of adults having seriously defective sight."

Law Governing State Commissions for the Blind

The following is a summary of the laws governing the establishment and operation of state commissions for the blind in the United States. The laws are based on the principle that the State has a duty to provide for the education, training, and employment of its blind citizens. The laws are designed to ensure that the State's resources are used in the most effective manner possible to achieve this purpose. The laws are divided into two main parts: the first part deals with the establishment and organization of the commission, and the second part deals with the commission's powers and duties. The first part of the laws provides for the establishment of a commission for the blind in each State. The commission is to be composed of a number of members, including representatives of the blind, and is to be headed by a chairman. The laws also provide for the appointment of a secretary to the commission. The second part of the laws deals with the commission's powers and duties. The commission is given the authority to investigate the needs of the blind, to make recommendations to the State regarding the establishment and operation of schools, workshops, and other institutions for the blind, and to administer the State's funds for the blind. The laws also provide for the commission to have the power to make contracts with private organizations for the purpose of carrying out its duties.

The laws governing the establishment and operation of state commissions for the blind in the United States are designed to ensure that the State's resources are used in the most effective manner possible to achieve the purpose of providing for the education, training, and employment of its blind citizens. The laws are divided into two main parts: the first part deals with the establishment and organization of the commission, and the second part deals with the commission's powers and duties. The first part of the laws provides for the establishment of a commission for the blind in each State. The commission is to be composed of a number of members, including representatives of the blind, and is to be headed by a chairman. The laws also provide for the appointment of a secretary to the commission. The second part of the laws deals with the commission's powers and duties. The commission is given the authority to investigate the needs of the blind, to make recommendations to the State regarding the establishment and operation of schools, workshops, and other institutions for the blind, and to administer the State's funds for the blind. The laws also provide for the commission to have the power to make contracts with private organizations for the purpose of carrying out its duties.

The laws governing the establishment and operation of state commissions for the blind in the United States are designed to ensure that the State's resources are used in the most effective manner possible to achieve the purpose of providing for the education, training, and employment of its blind citizens. The laws are divided into two main parts: the first part deals with the establishment and organization of the commission, and the second part deals with the commission's powers and duties. The first part of the laws provides for the establishment of a commission for the blind in each State. The commission is to be composed of a number of members, including representatives of the blind, and is to be headed by a chairman. The laws also provide for the appointment of a secretary to the commission. The second part of the laws deals with the commission's powers and duties. The commission is given the authority to investigate the needs of the blind, to make recommendations to the State regarding the establishment and operation of schools, workshops, and other institutions for the blind, and to administer the State's funds for the blind. The laws also provide for the commission to have the power to make contracts with private organizations for the purpose of carrying out its duties.

INDUSTRIAL DISPUTES

Strikes and Lockouts in the United States in October, 1928

DATA regarding industrial disputes in the United States for October, 1928, with comparable data for preceding months are presented below. Disputes involving fewer than six workers and lasting less than one day have been omitted.

The bureau is dependent upon trade journals, newspapers, and labor periodicals for notices of strikes. These reports are followed up by correspondence and when necessary by personal visits of representatives of the conciliation service or of this bureau.

Table 1 is a summary table showing for each of the months—January, 1927, to October, 1928, inclusive—the number of disputes which began in those months, the number in effect at the end of each month, and the number of workers involved. It also shows, in the last column, the economic loss (in man-days) involved. The number of workdays lost is computed by multiplying the number of workers affected in each dispute by the length of the dispute measured in working-days as normally worked by the industry or trade in question. It is to be noted that the figures given include only those disputes which have been verified by the bureau.

TABLE 1.—INDUSTRIAL DISPUTES BEGINNING IN AND IN EFFECT AT END OF EACH MONTH, JANUARY, 1927, TO OCTOBER, 1928

| Month and year | Number of disputes | | Number of workers involved in disputes | | Number of man-days lost during month |
|------------------------------|--------------------|---------------------------|--|---------------------------|--------------------------------------|
| | Beginning in month | In effect at end of month | Beginning in month | In effect at end of month | |
| January, 1927 | 37 | 18 | 5,915 | 2,287 | 58,125 |
| February, 1927 | 65 | 45 | 9,756 | 5,717 | 115,229 |
| March, 1927 | 74 | 67 | 13,142 | 8,182 | 214,283 |
| April, 1927 | 87 | 88 | 202,406 | 199,701 | 5,265,420 |
| May, 1927 | 107 | 116 | 22,245 | 200,702 | 5,136,006 |
| June, 1927 | 80 | 88 | 18,957 | 196,323 | 4,863,345 |
| July, 1927 | 65 | 63 | 33,994 | 199,287 | 5,308,123 |
| August, 1927 | 57 | 53 | 8,150 | 198,444 | 4,999,751 |
| September, 1927 | 57 | 58 | 12,282 | 196,829 | 4,945,702 |
| October, 1927 | 50 | 58 | 13,024 | 82,095 | 2,724,117 |
| November, 1927 | 27 | 51 | 5,282 | 82,607 | 2,040,140 |
| December, 1927 | 28 | 54 | 4,281 | 81,229 | 2,129,153 |
| January, 1928 | 43 | 62 | 18,263 | 81,676 | 2,135,092 |
| February, 1928 | 47 | 61 | 33,602 | 104,883 | 2,155,559 |
| March, 1928 | 34 | 63 | 7,145 | 78,362 | 2,343,415 |
| April, 1928 | 62 | 70 | 143,834 | 134,382 | 4,884,430 |
| May, 1928 | 72 | 74 | 15,138 | 136,094 | 3,526,608 |
| June, 1928 | 40 | 64 | 20,941 | 134,406 | 3,580,719 |
| July, 1928 | 53 | 60 | 17,232 | 134,102 | 3,365,803 |
| August, 1928 | 57 | 59 | 8,279 | 129,210 | 3,577,599 |
| September, 1928 ¹ | 41 | 48 | 8,985 | 65,260 | 2,614,354 |
| October, 1928 ¹ | 42 | 56 | 25,329 | 45,740 | 1,349,347 |

¹ Preliminary figures subject to revision.

Occurrence of Industrial Disputes, by Industries

TABLE 2 gives by industry the number of strikes beginning in August, September, and October, 1928, and the number of workers directly involved.

TABLE 2.—INDUSTRIAL DISPUTES BEGINNING IN AUGUST, SEPTEMBER, AND OCTOBER, 1928

| Industry | Number of disputes beginning in— | | | Number of workers involved in disputes beginning in— | | |
|--|----------------------------------|-----------|---------|--|-----------|---------|
| | August | September | October | August | September | October |
| Barbers | 1 | | | 2,000 | | |
| Broom and brush workers | | 1 | | | 100 | |
| Building trades | 9 | 5 | 5 | 576 | 950 | 210 |
| Chauffeurs and teamsters | 1 | | 1 | 10 | | 27 |
| Clothing workers | 18 | 9 | 7 | 485 | 434 | 251 |
| Farm labor | | | 3 | | | 675 |
| Fishermen | 1 | | | 75 | | |
| Food workers | 1 | | | 75 | | |
| Furniture workers | 1 | 2 | | 27 | 28 | |
| Iron and steel workers | 2 | | | 346 | | |
| Leather | 1 | | | 26 | | |
| Lumber and timber workers | 2 | | | 336 | | |
| Metal trades | 2 | 2 | | 96 | 56 | |
| Mine workers | 4 | 12 | 13 | 3,279 | 6,218 | 12,985 |
| Motion-picture operators and theater workers | 3 | 5 | 6 | 73 | 810 | 132 |
| Pottery workers | | | 1 | | | 37 |
| Printing and publishing | 1 | | 1 | 40 | | 10 |
| Rubber workers | | | 1 | | | 900 |
| Shipbuilding | 1 | | | 30 | | |
| Textile workers | 5 | 3 | 2 | 676 | 362 | 3,050 |
| Miscellaneous | 4 | 2 | 2 | 120 | 27 | 7,052 |
| Total | 57 | 41 | 42 | 8,279 | 8,985 | 25,329 |

Size and Duration of Industrial Disputes, by Industries

TABLE 3 gives the number of industrial disputes beginning in October, classified by number of workers and by industries.

TABLE 3.—NUMBER OF INDUSTRIAL DISPUTES BEGINNING IN OCTOBER, 1928, CLASSIFIED BY NUMBER OF WORKERS AND BY INDUSTRIES

| Industry | Number of disputes beginning in October, 1928 involving— | | | | | |
|--|--|--------------------------|---------------------------|-----------------------------|-------------------------------|------------------------|
| | 6 and under 20 workers | 20 and under 100 workers | 100 and under 500 workers | 500 and under 1,000 workers | 1,000 and under 5,000 workers | 5,000 workers and over |
| Building trades | 2 | 2 | 1 | | | |
| Chauffeurs and teamsters | | 1 | | | | |
| Clothing workers | 4 | 2 | 1 | | | |
| Farm labor | | 1 | 1 | 1 | | |
| Mine workers | | 1 | 4 | 2 | 6 | |
| Motion-picture operators and theater workers | 2 | 4 | | | | |
| Pottery workers | | 1 | | | | |
| Printing and publishing | 1 | | | | | |
| Rubber workers | | | | 1 | | |
| Textile workers | | 1 | | | 1 | |
| Miscellaneous | | 1 | | | | 1 |
| Total | 9 | 14 | 7 | 4 | 7 | 1 |

In Table 4 are shown the number of industrial disputes ending in October, by industries and classified duration.

TABLE 4.—NUMBER OF INDUSTRIAL DISPUTES ENDING IN OCTOBER, 1928, BY INDUSTRIES AND BY CLASSIFIED DURATION

| Industry | Classified duration of strikes ending in October, 1928 | | | | | | |
|---|--|-------------------------------------|--------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| | One-half month or less | Over one-half and less than 1 month | 1 month and less than 2 months | 2 months and less than 3 months | 3 months and less than 4 months | 5 months and less than 6 months | 8 months and less than 9 months |
| Building trades..... | 1 | | 2 | | | | |
| Clothing workers..... | 7 | 1 | | | 1 | | 1 |
| Farm labor..... | 2 | | | | | | |
| Furniture workers..... | | | | 1 | | | |
| Mine workers..... | 10 | | | | 1 | | |
| Motion-picture operators and theater workers..... | 3 | | 1 | | | | |
| Textile workers..... | | | | | | 1 | |
| Miscellaneous..... | 2 | | | | | | |
| Total..... | 25 | 1 | 3 | 1 | 2 | 1 | 1 |

Principal Strikes and Lockouts Beginning in October, 1928

EXPRESS workers, New York.—An unannounced "outlaw" strike of approximately 7,000 employees (platform men, clerks, teamsters, and chauffeurs) of the American Railway Express Co. began in New York City and vicinity shortly before midnight of October 9 and ended on the night of October 11, having lasted about two days.

Reports are very conflicting both as to the cause of the strike and the number of workers involved.

The strike had begun to cause extensive congestion of express shipments in railroad cars and depots, although the company had placed an embargo on all incoming and outgoing express matter. The decision to return to work was reached by the strikers after hearing an address by the president of the Brotherhood of Railway and Steamship Clerks, who advised them to honor their contract with the company by returning to work pending the outcome of a conference between representatives of the union and the company. He explained after the meeting that the workers' chief demand was for recognition of the union.

By others it had been stated that the trouble was the result of a jurisdictional dispute between the Brotherhood of Teamsters and the Brotherhood of Railway and Steamship Clerks as to which union should have jurisdiction over the teamsters, chauffeurs, and stablemen.

According to reports from union sources the strike was followed by full recognition of the Brotherhood of Railway Clerks as the representative of platform men, clerks, teamsters, and chauffeurs, members of that organization, and the company agreed to meet the representatives of the employees for the purpose of giving consideration to and disposing of grievances under the terms of the railway labor act.

From the official journal of the Brotherhood of Railway and Steamship Clerks the following statement of the cause and result of the strike is taken:

The New York settlement definitely disposes of the dispute, now nearly a year old, about the meaning of an exchange of correspondence last December

between our express national negotiating committee and the company's committee on wages and working conditions, which formed the basis of an understanding whereby the express company conceded to the brotherhood the exclusive right to represent employees of the company, with the understanding that should any dispute arise between our organization and the International Brotherhood of Teamsters over the right to represent drivers and chauffeurs, which could not be settled between the two organizations, such dispute would be submitted to arbitration.

In that correspondence our committee conceded that the International Brotherhood of Teamsters and the Chicago teamsters are entitled to similar right of representation in their respective jurisdictions.

A dispute arose over the meaning of the word "jurisdiction" as it was used in the correspondence. The express company interpreted it to mean that our brotherhood had given up jurisdiction over drivers and chauffeurs. Our committee maintained that it had reference to geographic jurisdiction, not craft jurisdiction. In order to avoid conflict between the two organizations over the question of craft jurisdiction, the committee said they had conceded to the International Brotherhood of Teamsters the right to represent drivers and chauffeurs at those points where they actually held a majority of them in their membership.

But the company interpreted the letter to mean that our organization had given up jurisdiction over these classes. It was upon their own interpretation of the letter that they refused to meet our representatives in New York, which resulted in the strike.

Two days before the strike Grand President Harrison had served notice on the company canceling the December correspondence.

The question of the right of our brotherhood to represent drivers and chauffeurs is now fully determined by the New York agreement.

Rubber workers, Massachusetts.—Objecting to a wage reduction of approximately 8 per cent to 300 workers in the "making room," 900 employees of the Cambridge Rubber Co., manufacturers of rubber footwear, ceased work on October 29. This wage adjustment in the making room had been made in order to bring that department in line with other departments of the plant. On November 5 the "employees returned at new rate and generally agree that it is fair in comparison with other departments and other footwear factories."

Silk workers, New Jersey.—Silk workers in Paterson began a strike on October 10 to enforce demands relative to wages, union recognition, and hours of labor. The demands as to wages were for an average increase, it is said, of 10 per cent. Approximately 1,300 workers quit work on the morning of the date mentioned, but subsequent stoppages brought the total number of strikers up to about 3,000, most of whom were silk weavers. Of something like 150 establishments involved, some were members of the Broadsilk Manufacturers' Association. Some of the workers are members of the Associated Silk Workers, by whom the strike has been fostered.

The manufacturers' association on October 2 issued a statement declaring that "the broad-silk industry in Paterson is committed to the 8-hour day or the 44-hour week," and continuing: "Those mills working more than 8 hours a day are in many cases urged by the workers to do so, and these mills would readily go back to the 8-hour day if their workers so desired."

To this statement the union replied, calling it "a healthy indication of a general and well-founded belief that a general adoption of the 8-hour day would be a long step toward standardization so necessary and so much needed to stabilize and exercise a proper degree of control of the silk industry," but going on to state:

However, half truths are misleading and fall far short of describing the true conditions. The statement declares that in many cases the workers themselves

are responsible. The manufacturers fail to make clear the fact that most of the shops working long hours do so because of the competition among the manufacturers. The average man in addressing himself to this problem fails to note the interrelation of hours and wage rates. Thus it is that long hours have naturally a tendency to lower wage rates. And inversely through the same universal law, long hours are the inevitable and natural result of low prices due to successive wage cuts. This is brought about by the worker taking the line of least resistance, working longer hours, rather than making vigorous and determined steps to resist reductions.

Wages, hours of employment, number of machines operated, have no recognized limits, other than the peak of human endurance.

The first of the settlements embodying the union demands was effected on October 13 when the Belfield Silk Co., employing 40 workers, signed an agreement providing for an 8-hour day, a revised wage schedule and recognition of the union. This agreement, which covers the demands of the workers, reads as follows:

It is agreed that the firm or corporation herein named will operate its plant on the basis of 8 hours per day and 44 hours per week.

No work shall be done on Saturday afternoons. Double shifts involving night work shall not exceed 44 hours per week. No work shall be done on Sunday by textile workers, and the firm herein mentioned further agrees to pay wages in accordance with the price list now recognized and in force, including a price list approved and adopted in September, 1928.

And it is further agreed and understood that in the case of jobs difficult to classify, such as tinsels, straws, artificial warps, horsehair, etc., prices on such goods shall be determined by prevailing conditions.

And it is further agreed that the firm or corporation herein named shall acknowledge and recognize the right and principle of collective bargaining in their relations with the Associated Silk Workers of America, through its members acting as agents thereof.

Similar settlements have been made from time to time with other mills, so that by the end of October press reports showed that 128 plants had settled and about 1,700 strikers had returned to work.

Anthracite miners, Pennsylvania.—Objecting to the employment of a laborer from No. 6 shaft as a miner in No. 1 drift of the Susquehanna Collieries Co., Nanticoke, Pa., 2,086 miners quit work from October 10 to October 16. The miners contended, it appears, that the employee was ineligible for the position on account of the seniority rule. The man was returned to No. 6 shaft as a miner.

Bituminous coal miners, Wyoming.—After a scale committee representing both the operators and miners in southern Wyoming had worked out a new agreement similar to the new agreement adopted in Illinois, approximately 1,300 miners in the Rock Springs district ceased work because of objection to a reduced wage scale.

The strike lasted from October 16 to October 19, work being resumed under the old scale, pending a referendum vote. This vote was taken on October 29, and failed to carry. The men have continued at work, pending further negotiations.

Bituminous coal miners, Illinois.—The No. 2 mine of the Chicago, Wilmington & Franklin Coal Co., at Orient, Ill., was affected by a "wildcat" strike of 1,300 miners from October 8 to October 13, because of conditions affecting 80 loaders. The miners objected "to a division of time which was required for a period of two weeks while additional mine cars and locomotives were being obtained, which had been on order for some time but which the manufacturer failed to ship on time. It was not possible to employ the above 80

men steadily and they had to lose one day out of every eight working-days until such time as the equipment arrived."

This strike did not have the support of the union leaders and the men returned to work under conditions that formerly prevailed.

Bituminous coal miners, Iowa.—Because of a misunderstanding of a proposed new wage scale 3,000 miners in Iowa, District 13, United Mine Workers of America, stopped work for one day, October 1.

Principal Strikes and Lockouts Continuing into October, 1928

BITUMINOUS coal strikes.—Of the major suspensions of April 1, 1927, and April 1, 1928, mention was made in the preceding issue of the Review of the settlement in Iowa, which terminated the suspension of April 1, 1928. No general settlements have been reported for Ohio, Pennsylvania, or West Virginia, where the suspension began April 1, 1927, but it is evident that many of the mines in these States are operating nonunion or open shop, especially in northern West Virginia where production was never seriously affected by the strike.

Clothing workers, Wisconsin.—A dispute over the open shop, which the firm of David Adler & Sons Co., clothing manufacturers, Milwaukee, sought to establish in their plants, resulted in a strike or lockout on or about April 16, 1928. (See article on page 171 of this issue.)

Conciliation Work of the Department of Labor in October, 1928

By HUGH L. KERWIN, DIRECTOR OF CONCILIATION

THE Secretary of Labor, through the conciliation service, exercised his good offices in connection with 53 labor disputes during October, 1928. These disputes affected a known total of 32,005 employees. The table following shows the name and location of the establishment or industry in which the dispute occurred, the nature of the dispute (whether strike or lockout or controversy not having reached the strike or lockout stage), the craft or trade concerned, the cause of the dispute, its present status, the terms of settlement, the date of beginning and ending, and the number of workers directly and indirectly involved.

On November 1, 1928, there were 24 strikes before the department for settlement and in addition 15 controversies which had not reached the strike stage. The total number of cases pending was 39.

CONCILIATION WORK OF THE DEPARTMENT

167

| Company or industry and location | Nature of controversy | Craftsmen concerned | Cause of dispute | Present status and terms of settlement | Duration | | Workers involved | |
|---|-----------------------|------------------------|---|--|----------------|-------------|------------------|------------|
| | | | | | Beginning 1928 | Ending 1928 | Directly | Indirectly |
| Shell Oil Co., Long Beach, Calif. | Controversy | Engineers and helpers. | Wages and classification. | Adjusted. Wages and classification remain same as in memorandum of terms. | Sept. 11 | Oct. 2 | 12 | 200 |
| Shell Oil Co., Ventura, Calif. | do. | Mechanical crafts. | do. | Pending. | Sept. 1 | | | 500 |
| Remsen Shirt Co., New York City. | Strike | Shirt workers. | Asked union recognition. | Unadjusted. Company signed union agreement before arrival of commissioner. | Sept. 17 | Sept. 30 | 10 | 30 |
| Women's Novelty Shoe Co., Lynn, Mass. | do. | Shoe workers. | Wage dispute. | Pending. (Refuse to deal with union workers.) | Sept. 25 | | 9 | 160 |
| Allen Stove & Range Co., Nashville, Tenn. | do. | Molders. | Alleged discrimination; discharge. | Unable to adjust. | Sept. 10 | Oct. 4 | 34 | 216 |
| Telephone building, Des Moines, Iowa. | do. | Carpenters, lathers. | Jurisdiction of metal-base work. | Adjusted. International unions to fix terms. | Sept. 20 | Oct. 1 | 35 | |
| Embassy Theater, San Francisco, Calif. | do. | Musicians. | Demand that musicians be employed. | Pending. | Oct. 8 | | 12 | 35 |
| Marine workers, New York Harbor and vicinity. | Controversy | Marine workers. | Asked \$10 per month increase; pay for overtime and Sunday holiday. | Adjusted. Allowed \$5 per month increase, overtime pay, and Sunday holiday except boats with relief crews. | Sept. 26 | Oct. 9 | 5,000 | 15,000 |
| DuBois Silk Throwing Co., DuBois, Pa. | Strike | Silk throwers. | Change from weekly pay to piece rates. | Pending. Part of workers have returned to work. | Sept. 27 | | 300 | 25 |
| Mary D. Colliery, Hazelbrook Coal Co., Pottsville, Pa. | do. | Anthracite miners. | Alleged discrimination in hiring men. | Adjusted. District officers to fix terms. | Sept. 24 | Oct. 1 | 500 | |
| Leclair Theater, Moline, Ill. | Controversy | Musicians. | Ask that musicians be employed. | Adjusted. Six-piece orchestra to be employed Jan. 1, 1929, for nine weeks. | Oct. 1 | Oct. 30 | 6 | |
| State Hospital Building, Danville, Pa. | do. | Electricians. | Wages and working conditions. | Adjusted. Demands withdrawn. | Oct. 10 | Nov. 12 | 20 | 16 |
| Susquehanna Coal Co., Glen Lyon, Pa. | Strike | Miners. | Dispute relative to seniority rights. | Adjusted. Returned; committee and officials to settle. | do. | Oct. 16 | 1,300 | 20 |
| Tweedie Footwear Corporation, Jefferson City, Mo. | do. | Shoe workers. | Objection to "time-clock" record of time and computation of wages. | Pending. | June 25 | | 92 | 400 |
| Naborhood Theaters, Tacoma, Wash. | Threatened strike. | Musicians. | Objection to working conditions. | Adjusted. Amicable agreement concluded. | Oct. 20 | Oct. 30 | 10 | (1) |
| Tanzer Sheep Lined Coat Manufacturing Co., New York City. | Strike | Coat workers. | Wage dispute; organization. | Pending. (Shop picketed). | Sept. 4 | | 4 | |

1 Not reported.

LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS CONCILIATION SERVICE, OCTOBER, 1928—Contd.

| Company or industry and location | Nature of controversy | Craftsmen concerned | Cause of dispute | Present status and terms of settlement | Duration | | Workers involved | |
|---|-----------------------|--------------------------|--------------------------------------|--|----------------|-------------|------------------|------------|
| | | | | | Beginning 1928 | Ending 1928 | Directly | Indirectly |
| Gilbert Shoe Co., Haverhill, Mass. | Strike | Shoe workers | Dispute over wages of "turners." | Adjusted. Returned; wage question to be settled according to agreement. | Sept. 27 | Oct. 10 | 28 | 200 |
| Truck drivers, Rockford, Ill. | do | Drivers | Asked wage increase | Adjusted. Allowed \$1.50 per hour; 30 cents per hour increase; only part of drivers allowed to return. | Oct. 10 | Oct. 15 | 21 | 18 |
| Shell Oil Co., Ventura, Calif. | Controversy | Plant operators | Classification and wage dispute. | Adjusted. Company will investigate classification, etc. | Oct. 1 | do | 12 | 100 |
| J. T. Evans Co., Wilkes-Barre, Pa. | Strike | Plumbers | Local union dispute. | Pending. | Mar. 1 | do | 45 | 31 |
| Majestic Theater, Harrisburg, Pa. | Controversy | Musicians | Refusal to employ union orchestra. | Adjusted. Continue without change; demands withdrawn. | Oct. 1 | Oct. 20 | 7 | 31 |
| Rickards-Nace Amusement Co., Phoenix, Ariz. | Strike | Operators, stage hands | Asked wage increase | Pending | Oct. 4 | do | 12 | 40 |
| Do. | do | Musicians | do | do | Oct. 28 | do | 22 | 30 |
| Walter Reid Theaters, Asbury Park, Long Branch, and Red Bank, N. J. | Controversy | do | Working conditions | Unclassified. Settled by parties at interest. | Oct. 15 | Oct. 23 | (1) | do |
| 3 broad-silk companies, Summit, N. J. | Strike | Silk weavers | Wages and working conditions. | Pending | Oct. 16 | do | 240 | do |
| 13 broad-silk companies, Paterson, N. J. | do | do | Wages, hours, and union recognition. | Adjusted. Allowed 10 per cent wage increase, 8-hour day, 44-hour week, and union recognition. | Oct. 10 | Oct. 15 | 284 | 48 |
| 16 broad-silk companies, Paterson, N. J. | do | do | do | do | do | Oct. 17 | 436 | 28 |
| 18 broad-silk companies, Paterson, N. J. | do | do | do | do | do | Oct. 18 | 275 | do |
| 14 broad-silk companies, Paterson, N. J. | do | do | do | do | do | Oct. 19 | 147 | 20 |
| 8 broad-silk companies, Paterson, N. J. | do | do | do | do | do | Oct. 20 | 135 | 20 |
| 41 broad-silk companies, Paterson, N. J. | do | do | do | do | do | do | 560 | 32 |
| Building, Polk, Pa. | do | Building crafts | Organization of unions on job. | Unable to adjust. (Matter still in dispute.) | Oct. 15 | do | 10 | 31 |
| Duclases Underwear Co., Old Forge, Pa. | do | Silk-mill workers | Discharge of forelady; wages | Pending. (Nothing can be done at this time.) | Oct. 19 | do | 60 | 30 |
| Claremont Shoe Co., Haverhill, Mass. | do | Shoe workers | Dispute over prices for new work. | Adjusted. To negotiate as provided by existing agreement. | Oct. 18 | Oct. 23 | 19 | 331 |
| Snappy Shoe Co., Haverhill, Mass. | do | Tree workers and packers | Price dispute | Adjusted. To be submitted to arbitration. | Oct. 16 | do | 24 | 125 |

| Shenango Pottery Co., New Castle, Pa. | Pottery workers. | Working conditions. | Pending. | Oct. 18 | 173 | 650 |
|--|--------------------------|---|--|----------|--------|--------|
| Lake Erie Coal Co., Peoria, Ill. | Miners | do. | Unclassified. Unauthorized strike; ordered back before commissioner's arrival. | Oct. 17 | 150 | |
| Strand, Rialto, and Orpheum Theaters, Clinton, Iowa. | Musicians | Unionization and sympathy with musicians in Leclair Theater. | Adjusted. All returned when Leclair Theater settled. | Oct. 23 | 11 | |
| Klungman & Sons, New York City | Ladies' tailors | Renewal of agreement. | Pending. | Sept. 24 | 80 | |
| Public school building, Brooklyn, N. Y. | Building crafts | Refusal to work with non-union electricians. | Adjusted. Returned; settled in conference. | Oct. 24 | 100 | |
| Marlon Upholstering Co., New York City | Upholsterers | Recognition and working conditions. | Pending. | do. | 12 | |
| Glen Alden Coal Co., Scranton, Pa. | Miners | Union factional fight. | Adjusted. Returned without change. | Oct. 19 | 650 | 450 |
| Methodist Hospital Building, Indianapolis, Ind. | Building trades | Jurisdiction and nonunion labor. | Adjusted. Settled in conference. | Oct. 22 | 50 | 50 |
| Theaters, Boston, Mass. | Musicians | Working conditions; movie-tone. | Unclassified. Satisfactory settlement before arrival of commissioner. | Oct. 6 | 10 | |
| Building, Morgan, Pa. | Plumbers and plasterers. | Attempt to organize men on job. | Adjusted. Returned. Organization not effected. | Oct. 3 | 14 | 11 |
| "Sun-Telegraph" Co., Pittsburgh, Pa. | Drivers. | Discharge of four drivers. | Adjusted. Reinstated; allowed wages for time off duty. | Oct. 16 | 65 | 65 |
| Pennsylvania Coal Co., Pittston, Pa. | Miners | Working conditions. | Adjusted. Committee and district officers to fix terms. | Oct. 26 | 1,614 | 100 |
| Standard Furniture Co. and Deluxe Furniture Co., Pittsburgh, Pa. | Upholsterers | Discharge of foreman; open shop. | Pending. | Aug. 14 | 7 | 25 |
| Dave Harmon and his orchestra, Philadelphia, Pa. | Musicians | Union dispute; orchestra fined and suspended by American Federation of Musicians. | Unclassified. Dispute must be settled by parties at interest. | Oct. 28 | 22 | |
| Palace and Bijou theaters, Mason City, Iowa. | Musicians and operators. | Dispute relative union or nonunion operation; sympathy with Leclair Theater. | Adjusted. Returned when Leclair Theater settled. | Oct. 1 | 8 | |
| Rialto Theater, Fort Dodge, Iowa. | Operators, organist. | do. | do. | do. | 4 | 4 |
| Rialto Theater, Boone, Iowa. | do. | do. | do. | do. | 3 | 3 |
| Rialto Theater, Burlington, Iowa. | do. | do. | do. | do. | 4 | 4 |
| Total | | | | | 12,908 | 19,037 |

¹ Not reported.

Settlement of Trainmen's Dispute on Western Railroads

THE report of the emergency board appointed by the President to investigate the dispute between the western railroads and their conductors and trainmen, made public on October 30, suggested that the following proposals and counterproposals be submitted to the vote of the employees and that the carriers abide by the result:

1. Six and one-half per cent increase without change of rules.
2. Seven and one-half per cent increase and the elimination of the double-header and tonnage limitation rules.

Each of the above includes the continuation of existing differentials for mountain and other special service, and the addition of the requested increase to baggagemen for mail, express, and dynamo service.

3. The Washington agreement providing for an increase of $7\frac{1}{2}$ per cent on the standard rates for conductors and trainmen, and a procedure, including arbitration under the railway labor act, under which the double-header, helper district, car limit, and tonnage limit rules might be taken up by each carrier in special cases where a carrier claimed such rules produced burdensome or objectionable conditions.

4. That whatever proposal is accepted should be made effective May 1, 1928.

According to press reports the employees affected have agreed to accept the first of the above alternatives regarding wages, namely, a wage increase of $6\frac{1}{2}$ per cent without change of rules, the wage increase to be retroactive to May 1, 1928, and effective to May 1, 1929.

The dispute grew out of the refusal of the western railroads to consider the demands of their conductors and trainmen, February 27, 1927, for a $7\frac{1}{2}$ per cent increase in wages. A similar increase had been granted by the eastern railroads in 1926 and by the southeastern railroads in 1927 to the same class of employees.

On November 1, 1927, they renewed their demands for an increase in wages to become effective March 1, 1928, and in addition they demanded a change in the pick-up and drop rule. In July, 1928, conferences were held between employees and the carriers, during which the carriers asked for certain changes in the rules, among which were the elimination of the double-header rule and the rules restricting tonnage and car limits. The employees contended that the double-header rule makes for safety of the employees, while the carriers contended that it only hampers efficient and economical operation and could be eliminated without hazard to the men engaged in train and engine service.

These conferences proved fruitless and on July 19 the carriers applied to the United States Board of Mediation for its services in mediation; and, if this failed, suggested that matters in dispute be submitted to arbitration. Mediation was not successful and the employees declined to accept arbitration.

Under the provisions of the railway labor act the President appointed the emergency board on September 29 to investigate and report its findings on the dispute. (See Labor Review, October, 1928 (p. 84), for personnel of board.)

Cooperation of Union and Employer to Win an Industrial Dispute¹

A NOVEL means of winning a strike, and one which has attracted the attention not only of the clothing industry but of economists, has been resorted to by the Amalgamated Clothing Workers of America.

For years the union has had contractual relations with the clothing firm of David Adler & Sons, of Milwaukee, 800 of its members being employed there. Early in April, 1928, following a change in the personnel of the board of directors, the firm made a sudden decision to operate henceforth on a nonunion basis, and so informed the union, although its agreement with the union had not yet expired. The union countered by calling out all of its members at work there, and commenced a campaign of picketing. An injunction was sought in the circuit court by the firm to restrain the union, but this was denied by the court on the ground that the company had acted in violation of its agreement and that the controversy really amounted to a lockout by the company and not a strike by the union. The decision of the court also held that the firm was liable for the wages of the workers from the day of the shutdown until the expiration of its agreement with the union.

The situation continued in a state of deadlock for months, with the workers holding firm and the company refusing to rescind its decision to conduct an open shop.

On August 31, 1928, the union announced through the columns of its paper, *The Advance*, that it had made arrangements with the firm of Hart, Schaffner & Marx, of Chicago (a company with which the union had had 17 years of contractual relations "without a stoppage ever having occurred or a rift in the relations * * * ever having been even threatened") for the opening of a new shop. One floor of a building in Milwaukee was rented, machines and equipment installed and the general procedure planned out, and the shop started operations early in October, 1928.

The new shop is to be run on a contract basis under the direct management of officers of the union. It will manufacture for Hart, Schaffner & Marx a new line of clothing not heretofore made by that firm. Not all of the 800 former Adler employees will be given employment here; some will continue to receive strike pay and will carry on picketing and other strike activities against the Adler firm.

This is the first time, to the knowledge of the Bureau of Labor Statistics, in which one (union) firm has acted in concert with a union to bring another (nonunion) company into line. In this connection *The Advance* makes the following comment:

Of course the arrangement entered into between the Amalgamated and the firm of Hart, Schaffner & Marx would not have been possible unless the Amalgamated earned for itself the confidence of the Chicago concern. This concern knows, from long experience, that when the Amalgamated assumes responsibility in its contractual relations it will carry it out both in letter and in spirit.

It was this confidence that was the sole factor in the determination of Hart, Schaffner & Marx to give the new Amalgamated shop a line of work that would keep the members in Milwaukee employed as long as the Amalgamated saw fit to run that plant.

¹ Except where otherwise noted, data are from *The Advance*, issues of Aug. 31, Sept. 7, Sept. 14, Sept. 28, Oct. 5, and Oct. 12, 1928.

President Hillman stated: "We are opening the shop in Milwaukee to prove that labor is intelligent enough to manufacture by its own direction, and to convince the Adler firm as well as other employers in the clothing industry that the open shop in our industry is a thing of the past."

The union holds a one-year lease on the present quarters of the factory, with the option of renewal for a further period of four years. Statements of the union emphasize, however, that the scheme is merely a temporary one, and when the firm "is ready to assume its obligations, the union will liquidate the shop and return the workers to their former jobs." It is pointed out, nevertheless, that Milwaukee "is not the only nonunion territory. The useful end which the present experiment is bound to serve can not be overemphasized, neither can it be localized. It is within the realm of possibility that what was done in Milwaukee may be attempted elsewhere, if and when an emergency will call for such step."

Another unusual development is indicated by an announcement by a member of the Hart, Schaffner & Marx firm, stating that for several years officers of the company had been discussing a plan whereby the union would take over the production end of the clothing business. He is quoted as saying: "It is an experimental proposition, and if the union goes through with its plan to operate a Milwaukee plant, our company will turn over part of its production on a contract basis."²

Settlement of Labor Conflict at Swedish Iron Mines

THE labor conflict which had been going on at the Swedish iron mines since January 2, 1928, was settled on August 27, according to a report from John Ball Osborne, American consul general at Stockholm.

The dispute began with the refusal of the operators to grant the workers' demands for wage increases, and apparently affected about 8,000 miners. The consular report states that the conflict practically crippled the exportation of iron ore from Sweden and also seriously affected the railroads, particularly one line which had been built almost solely for the transportation of ore from the mines to the shipping points. A number of the smaller railroads were obliged to discharge some of their employees, and it is reported that the State railroads were contemplating the dismissal of some of their men when the dispute was settled.

The terms of settlement retained, on the whole, the provisions of the previous agreement, although considerable adjustments are said to have been made in contract wages, the lower rates being raised and the higher ones in some cases being reduced.

² Manufacturing Clothier, East Stroudsburg, Pa., October, 1928, p. 36.

WAGES AND HOURS OF LABOR

Wages and Hours of Labor in Sawmills, 1928

DURING the summer of 1928 a study of wage rates, hours of labor, and earnings in the sawmills in the United States was made by the Bureau of Labor Statistics. Data covering 58,007 employees were collected by agents of the bureau from the pay rolls and other records of 319 representative sawmills in 22 States. Only 18 of the 58,007 employees were females.¹

The lumber production of the 22 States included in this report represents approximately 94 per cent of the total production in the country as a whole.

Summaries of average full-time hours per week, earnings per hour, and full-time earnings per week are presented in Table 1 for 1928, together with like figures for certain years from 1910 to 1925 in which studies were made by the bureau. Figures for 1928 in much more detail will be available later in bulletin form. Index numbers of these averages, with the 1913 average taken as the base, or 100 per cent, are also presented in the table. The averages in the table are for employees in selected occupations only for each of the years from 1910 to 1921 and for employees in all occupations in the industry from 1921 to 1928. Prior to 1921, due to lack of funds and of time necessary to collect and compile reports, the wage studies in this industry were limited to the major occupations.

Two sets of figures are shown for 1921—one for 33,115 employees in the selected occupations in 279 establishments and the other for 45,667 employees in all occupations in the industry in the 279 establishments. Average full-time hours per week for the 45,667 employees in all occupations in the industry in 1921 were 58, or 0.8 of an hour per week more than for the 33,115 in selected occupations only. Average earnings were 2.6 cents more per hour and \$1.75 more per week in all occupations than for those in selected occupations.

Index numbers of averages, with the 1913 average as the base or 100, are given for the purpose of making comparisons of the increases or decreases in hours and earnings from one year to another. In order to make the series continuous and comparable the index numbers for 1921 for selected occupations have been increased or decreased in proportion to the increase or decrease in the averages for all occupations as between 1921 and the specified succeeding years.

Average full-time hours per week changed very little between 1910 and 1915. The average for 1919 was 56.1, or 5 hours less per week than for 1915, a reduction of 8.2 per cent. Between 1919 and 1921 there was an increase of 1.1 hours, or 2 per cent. After 1921 very little change took place until 1928 when the hours worked per week averaged 1.5 hours less than in 1923 and 1925. Earnings per hour,

¹ Data relating to logging camps were also obtained in some States; the present article, however, deals only with sawmills.

which averaged 18 cents in 1910, did not vary greatly until 1919 when they were 36 cents per hour. Index numbers of average earnings per hour increased from 91.4 in 1915 to 194.6 in 1919, a gain of 112.9 per cent. They dropped to 166.5 in 1921, a decrease of 14.4 per cent; increased to 180.5 in 1923, an increase of 8.4 per cent; decreased to 178 in 1925 and increased to 184.9 in 1928.

Average full-time earnings per week followed somewhat the same course as earnings per hour. They increased from an index of 97.6 in 1910 to 178.8 in 1919; decreased to 156.5 in 1921; increased to 169.9 in 1923 and then dropped to 167.6 in 1925; and increased to 169.7 in 1928. The increase between 1913 and 1919 was 78.8 per cent, and the decrease between 1919 and 1928 was 5.1 per cent.

The changes from year to year in average full-time hours per week were responsible for the difference in the trend of average earnings per hour and of average full-time earnings per week.

TABLE 1.—AVERAGE HOURS AND EARNINGS WITH INDEX NUMBERS IN SAWMILLS, 1910 TO 1928

[1913 average = 100]

| Year | Number of establishments | Number of employees | Average full-time hours per week | Average earnings per hour | Average full-time earnings per week | Index numbers for— | | |
|-------------------------|--------------------------|---------------------|----------------------------------|---------------------------|-------------------------------------|--------------------------|-------------------|-----------------------------|
| | | | | | | Full-time hours per week | Earnings per hour | Full-time earnings per week |
| Selected occupations: | | | | | | | | |
| 1910..... | 245 | 23,316 | 61.3 | \$0.180 | \$10.99 | 100.3 | 97.3 | 97.6 |
| 1911..... | 299 | 31,495 | 61.4 | .176 | 10.76 | 100.5 | 95.1 | 95.6 |
| 1912..... | 361 | 34,884 | 61.5 | .178 | 10.89 | 100.7 | 96.2 | 96.7 |
| 1913..... | 361 | 34,328 | 61.1 | .185 | 11.26 | 100.0 | 100.0 | 100.0 |
| 1915..... | 348 | 39,879 | 61.1 | .169 | 10.30 | 100.0 | 91.4 | 91.5 |
| 1919..... | 141 | 18,022 | 56.1 | .360 | 20.13 | 91.8 | 194.6 | 178.8 |
| 1921 ¹ | 279 | 33,115 | 57.2 | .308 | 17.62 | 93.6 | 166.5 | 156.5 |
| All occupations: | | | | | | | | |
| 1921 ¹ | 279 | 45,667 | 58.0 | .334 | 19.37 | 93.8 | 180.5 | 169.9 |
| 1923..... | 252 | 45,068 | 58.1 | .362 | 21.03 | 93.8 | 178.0 | 167.6 |
| 1925..... | 299 | 61,193 | 58.1 | .357 | 20.74 | 93.8 | 178.0 | 167.6 |
| 1928..... | 319 | 58,007 | 56.6 | .371 | 21.00 | 91.3 | 184.9 | 169.7 |

¹ Two sets of averages are shown for 1921 for the industry—one for selected occupations and the other for all occupations in the industry. The 1910 to 1921 averages for selected occupations only are comparable one year with another, as are those for all occupations one year with another from 1921 to 1928.

Table 2 presents for 1925 and 1928 the average full-time hours per week, earnings per hour, and full-time earnings per week for the employees in each of the selected occupations and for the employees in all other occupations in the sawmill industry. Average full-time hours per week in 1925 in the various occupations ranged from 55.8 for machine feeders in the planing mill to 59.6 for other employees. The 1928 averages ranged from 55.2 for resaw sawyers, trimmer loaders, and graders to 57.8 for log yardmen.

Average earnings per hour in 1925 in the various occupations ranged from 30.9 cents for laborers to 87.7 cents for head band sawyers. The 1928 average ranged from 29.3 cents for log yardmen to 88.7 cents for head band sawyers.

Average full-time earnings per week by occupations in 1925 ranged from \$17.77 for laborers to \$50.60 for head band sawyers. The 1928 averages ranged from \$16.94 for log yardmen to \$50.29 for head band sawyers.

TABLE 2.—AVERAGE HOURS AND EARNINGS, 1925 AND 1928, BY OCCUPATION

| Occupation | Year | Number of establishments | Number of employees | Average full-time hours per week | Average earnings per hour | Average full-time earnings per week |
|--|------|--------------------------|---------------------|----------------------------------|---------------------------|-------------------------------------|
| Pondmen (including boom men and slip men) ¹ | 1928 | 248 | 1,344 | 56.9 | \$0.357 | \$20.31 |
| Yardmen, log ¹ | 1928 | 86 | 283 | 57.8 | .293 | 16.94 |
| Sawyers, head, band | 1925 | 274 | 644 | 57.7 | .877 | 50.60 |
| | 1928 | 288 | 668 | 56.7 | .887 | 50.29 |
| Sawyers, head, circular | 1925 | 42 | 57 | 58.2 | .816 | 47.49 |
| | 1928 | 45 | 58 | 57.6 | .740 | 42.62 |
| Doggers | 1925 | 285 | 1,170 | 58.2 | .332 | 19.32 |
| | 1928 | 281 | 961 | 57.6 | .335 | 19.30 |
| Setters | 1925 | 299 | 832 | 57.5 | .458 | 26.34 |
| | 1928 | 313 | 742 | 56.5 | .468 | 26.44 |
| Saw tailers (on head saws) | 1925 | 299 | 786 | 57.3 | .349 | 20.00 |
| | 1928 | 305 | 738 | 56.4 | .355 | 20.02 |
| Sawyers, gang | 1925 | 75 | 110 | 57.9 | .581 | 33.64 |
| | 1928 | 76 | 121 | 56.1 | .533 | 29.90 |
| Sawyers, resaw | 1925 | 152 | 296 | 55.9 | .489 | 27.34 |
| | 1928 | 173 | 346 | 55.2 | .475 | 26.22 |
| Edgermen | 1925 | 298 | 911 | 57.8 | .468 | 27.05 |
| | 1928 | 318 | 923 | 56.7 | .470 | 26.65 |
| Edger tailers ¹ | 1928 | 272 | 708 | 56.7 | .319 | 18.09 |
| Transfer men ¹ | 1928 | 172 | 708 | 55.5 | .341 | 18.93 |
| Trimmer loaders ¹ | 1928 | 216 | 630 | 55.2 | .379 | 20.92 |
| Trimmer operators | 1925 | 299 | 900 | 57.7 | .409 | 23.60 |
| | 1928 | 318 | 585 | 55.8 | .429 | 23.94 |
| Off-bearers (except on head saw) ¹ | 1928 | 208 | 860 | 55.9 | .317 | 17.72 |
| Graders ¹ | 1928 | 292 | 1,562 | 55.2 | .503 | 27.77 |
| Sorters ¹ | 1928 | 274 | 4,138 | 55.5 | .357 | 19.81 |
| Truckers ¹ | 1928 | 293 | 3,137 | 57.3 | .323 | 18.51 |
| Stackers, hand ¹ | 1928 | 275 | 4,317 | 57.5 | .371 | 21.33 |
| Machine feeders, planing mill | 1925 | 217 | 1,535 | 55.8 | .390 | 21.76 |
| | 1928 | 240 | 1,782 | 55.7 | .373 | 20.78 |
| Tally men ¹ | 1928 | 195 | 680 | 55.3 | .451 | 24.94 |
| Millwrights ¹ | 1928 | 263 | 701 | 56.0 | .611 | 34.22 |
| Laborers | 1925 | 299 | 36,698 | 57.5 | .309 | 17.77 |
| | 1928 | 314 | 22,026 | 56.9 | .303 | 17.24 |
| Other employees | 1925 | 299 | 17,516 | 59.6 | .419 | 24.97 |
| | 1928 | 314 | 9,971 | 56.3 | .438 | 24.66 |

¹ Data for this occupation are available for 1928 only, as the employees in it in 1925 were included in the group designated "Other employees."

Table 3 presents for each State, for 1928, average full-time hours per week, earnings per hour, and average full-time earnings per week of employees in six of the most important selected occupations in the sawmill industry. The figures for these occupations illustrate the variations in hours and earnings in each occupation in the industry in different States.

In the occupation of head band sawyers, average full-time hours per week ranged in the various States from 48 to 60.8. The average for all the States combined was 56.7 per week. Average earnings per hour, by States, ranged from 68.4 cents to \$1.176, and the average for all the States was 88.7 cents per hour. Average full-time earnings per week by States ranged from \$40.20 to \$56.57 and averaged \$50.29.

TABLE 3.—AVERAGE HOURS AND EARNINGS FOR SIX SELECTED OCCUPATIONS BY STATES, 1928

| Occupation and State | Number of establishments | Number of employees | Average full-time hours per week | Average earnings per hour | Average full-time earnings per week |
|-----------------------------|--------------------------|---------------------|----------------------------------|---------------------------|-------------------------------------|
| Sawyers, head, band: | | | | | |
| Alabama | 17 | 32 | 60.8 | \$0.820 | \$49.86 |
| Arkansas | 15 | 35 | 58.9 | .847 | 49.89 |
| California | 14 | 56 | 54.6 | 1.029 | 56.18 |
| Florida | 9 | 23 | 60.5 | .893 | 54.03 |
| Georgia | 12 | 14 | 59.2 | .828 | 49.02 |
| Idaho | 5 | 22 | 48.0 | .945 | 45.36 |
| Kentucky | 8 | 10 | 57.5 | .754 | 43.36 |
| Louisiana | 16 | 53 | 59.1 | .872 | 51.54 |
| Maine | 10 | 12 | 58.7 | .684 | 40.20 |
| Michigan | 21 | 41 | 59.0 | .768 | 45.31 |
| Minnesota | 4 | 30 | 60.0 | .844 | 50.64 |
| Mississippi | 16 | 53 | 58.4 | .884 | 51.63 |
| Montana | 5 | 14 | 50.7 | .982 | 49.82 |
| North Carolina | 23 | 33 | 60.0 | .697 | 41.82 |
| Oregon | 14 | 48 | 48.7 | 1.146 | 55.81 |
| South Carolina | 9 | 17 | 60.3 | .781 | 47.09 |
| Tennessee | 20 | 27 | 57.9 | .875 | 50.66 |
| Texas | 11 | 34 | 56.8 | .903 | 51.29 |
| Virginia | 11 | 18 | 60.7 | .695 | 42.19 |
| Washington | 19 | 51 | 48.1 | 1.176 | 56.57 |
| West Virginia | 10 | 18 | 60.0 | .806 | 48.36 |
| Wisconsin | 19 | 27 | 59.5 | .764 | 45.46 |
| Total | 288 | 668 | 56.7 | .887 | 50.29 |
| Doggers: | | | | | |
| Alabama | 20 | 82 | 60.4 | .237 | 14.31 |
| Arkansas | 15 | 92 | 59.0 | .286 | 16.87 |
| California | 9 | 24 | 56.3 | .436 | 24.55 |
| Florida | 10 | 28 | 62.4 | .237 | 14.79 |
| Georgia | 16 | 35 | 59.2 | .215 | 12.73 |
| Idaho | 2 | 10 | 48.0 | .460 | 22.08 |
| Kentucky | 8 | 19 | 57.4 | .345 | 19.80 |
| Louisiana | 17 | 94 | 58.9 | .281 | 16.55 |
| Maine | 11 | 19 | 59.1 | .328 | 19.38 |
| Michigan | 23 | 51 | 59.1 | .407 | 24.05 |
| Minnesota | 4 | 34 | 60.0 | .525 | 31.50 |
| Mississippi | 10 | 56 | 58.9 | .276 | 16.26 |
| North Carolina | 22 | 46 | 59.9 | .254 | 15.21 |
| Oregon | 9 | 34 | 48.6 | .543 | 26.39 |
| South Carolina | 10 | 33 | 60.0 | .223 | 13.38 |
| Tennessee | 20 | 48 | 57.9 | .314 | 18.18 |
| Texas | 9 | 61 | 59.6 | .295 | 17.58 |
| Virginia | 16 | 30 | 59.6 | .264 | 15.73 |
| Washington | 20 | 105 | 48.1 | .520 | 25.01 |
| West Virginia | 10 | 18 | 60.6 | .413 | 25.03 |
| Wisconsin | 19 | 38 | 59.2 | .408 | 24.15 |
| Other States | 1 | 4 | 54.0 | .450 | 24.30 |
| Total | 281 | 961 | 57.6 | .335 | 19.30 |
| Setters: | | | | | |
| Alabama | 21 | 35 | 60.4 | .344 | 20.78 |
| Arkansas | 15 | 39 | 58.7 | .384 | 22.54 |
| California | 14 | 59 | 54.9 | .624 | 34.26 |
| Florida | 12 | 26 | 61.2 | .372 | 22.77 |
| Georgia | 10 | 20 | 58.9 | .321 | 18.91 |
| Idaho | 5 | 31 | 48.0 | .650 | 31.20 |
| Kentucky | 9 | 11 | 56.8 | .426 | 24.20 |
| Louisiana | 18 | 61 | 58.8 | .411 | 24.17 |
| Maine | 12 | 19 | 58.4 | .404 | 23.59 |
| Michigan | 23 | 44 | 59.1 | .478 | 28.25 |
| Minnesota | 4 | 25 | 60.0 | .539 | 32.34 |
| Mississippi | 16 | 47 | 58.7 | .430 | 25.24 |
| Montana | 5 | 31 | 50.2 | .604 | 30.32 |
| North Carolina | 23 | 40 | 60.0 | .309 | 18.54 |
| Oregon | 14 | 53 | 48.6 | .680 | 33.05 |
| South Carolina | 10 | 18 | 60.0 | .339 | 20.34 |
| Tennessee | 20 | 27 | 57.7 | .420 | 24.23 |
| Texas | 11 | 37 | 58.9 | .365 | 21.50 |
| Virginia | 12 | 16 | 59.8 | .346 | 20.69 |
| Washington | 21 | 53 | 48.1 | .608 | 29.24 |
| West Virginia | 10 | 19 | 60.0 | .470 | 28.20 |
| Wisconsin | 19 | 31 | 59.5 | .452 | 26.89 |
| Total | 313 | 742 | 56.5 | .468 | 26.44 |

TABLE 3.—AVERAGE HOURS AND EARNINGS FOR SIX SELECTED OCCUPATIONS BY STATES, 1928—Continued

| Occupation and State | Number of establishments | Number of employees | Average full-time hours per week | Average earnings per hour | Average full-time earnings per week |
|---------------------------------|--------------------------|---------------------|----------------------------------|---------------------------|-------------------------------------|
| Saw tailors on head saw: | | | | | |
| Alabama..... | 21 | 37 | 60.6 | \$0.233 | \$14.12 |
| Arkansas..... | 15 | 47 | 58.9 | .274 | 16.14 |
| California..... | 14 | 53 | 54.9 | .466 | 25.58 |
| Florida..... | 12 | 24 | 61.5 | .238 | 14.64 |
| Georgia..... | 18 | 24 | 59.2 | .201 | 11.90 |
| Idaho..... | 5 | 22 | 48.0 | .467 | 22.42 |
| Kentucky..... | 9 | 11 | 56.8 | .326 | 18.52 |
| Louisiana..... | 18 | 59 | 59.7 | .269 | 16.06 |
| Maine..... | 11 | 15 | 58.7 | .338 | 19.84 |
| Michigan..... | 23 | 44 | 59.2 | .376 | 22.26 |
| Minnesota..... | 4 | 31 | 60.0 | .387 | 23.22 |
| Mississippi..... | 16 | 46 | 58.6 | .264 | 15.47 |
| Montana..... | 5 | 14 | 50.7 | .497 | 25.20 |
| North Carolina..... | 15 | 23 | 60.3 | .250 | 15.08 |
| Oregon..... | 14 | 67 | 48.5 | .547 | 26.53 |
| South Carolina..... | 10 | 16 | 60.0 | .210 | 12.60 |
| Tennessee..... | 20 | 27 | 57.9 | .298 | 17.25 |
| Texas..... | 11 | 33 | 59.1 | .266 | 15.72 |
| Virginia..... | 14 | 21 | 58.9 | .268 | 15.79 |
| Washington..... | 21 | 74 | 48.1 | .537 | 25.83 |
| West Virginia..... | 10 | 18 | 60.0 | .383 | 22.98 |
| Wisconsin..... | 19 | 32 | 59.4 | .363 | 21.56 |
| Total..... | 305 | 738 | 56.4 | .355 | 20.02 |
| Edgermen: | | | | | |
| Alabama..... | 21 | 44 | 60.8 | .348 | 21.16 |
| Arkansas..... | 15 | 55 | 59.0 | .405 | 23.90 |
| California..... | 14 | 57 | 54.7 | .672 | 36.76 |
| Florida..... | 12 | 33 | 61.5 | .360 | 22.14 |
| Georgia..... | 19 | 20 | 58.9 | .339 | 19.97 |
| Idaho..... | 5 | 22 | 48.0 | .620 | 29.76 |
| Kentucky..... | 9 | 11 | 56.8 | .443 | 25.16 |
| Louisiana..... | 18 | 107 | 59.0 | .374 | 22.07 |
| Maine..... | 12 | 16 | 58.7 | .417 | 24.48 |
| Michigan..... | 23 | 49 | 59.2 | .451 | 26.70 |
| Minnesota..... | 4 | 41 | 60.0 | .494 | 29.64 |
| Mississippi..... | 16 | 79 | 58.9 | .387 | 22.79 |
| Montana..... | 5 | 21 | 50.0 | .603 | 30.15 |
| North Carolina..... | 23 | 34 | 60.0 | .305 | 18.30 |
| Oregon..... | 14 | 67 | 48.7 | .780 | 37.99 |
| South Carolina..... | 10 | 26 | 60.0 | .326 | 19.56 |
| Tennessee..... | 20 | 26 | 58.0 | .433 | 25.11 |
| Texas..... | 11 | 48 | 59.1 | .387 | 22.87 |
| Virginia..... | 17 | 21 | 58.7 | .314 | 18.43 |
| Washington..... | 21 | 89 | 48.1 | .683 | 32.85 |
| West Virginia..... | 10 | 17 | 60.0 | .507 | 30.42 |
| Wisconsin..... | 19 | 40 | 59.6 | .457 | 27.24 |
| Total..... | 318 | 923 | 56.7 | .470 | 26.65 |
| Laborers: | | | | | |
| Alabama..... | 21 | 1,795 | 60.5 | .198 | 11.98 |
| Arkansas..... | 15 | 1,472 | 59.2 | .243 | 14.39 |
| California..... | 14 | 1,078 | 56.4 | .423 | 23.86 |
| Florida..... | 12 | 864 | 61.4 | .207 | 12.71 |
| Georgia..... | 19 | 704 | 59.5 | .185 | 11.01 |
| Idaho..... | 5 | 569 | 48.0 | .460 | 22.08 |
| Kentucky..... | 9 | 164 | 57.0 | .267 | 15.22 |
| Louisiana..... | 18 | 1,950 | 59.5 | .231 | 13.74 |
| Maine..... | 12 | 192 | 59.5 | .301 | 17.91 |
| Michigan..... | 23 | 828 | 59.0 | .345 | 20.36 |
| Minnesota..... | 4 | 753 | 60.1 | .363 | 21.82 |
| Mississippi..... | 16 | 1,967 | 59.7 | .237 | 14.15 |
| Montana..... | 5 | 422 | 50.6 | .436 | 22.06 |
| North Carolina..... | 23 | 1,052 | 60.2 | .213 | 12.82 |
| Oregon..... | 14 | 1,528 | 48.3 | .486 | 23.47 |
| South Carolina..... | 10 | 785 | 60.2 | .165 | 9.93 |
| Tennessee..... | 19 | 688 | 58.2 | .248 | 14.43 |
| Texas..... | 11 | 915 | 57.6 | .242 | 13.94 |
| Virginia..... | 14 | 366 | 60.1 | .247 | 14.84 |
| Washington..... | 21 | 2,510 | 48.0 | .488 | 23.42 |
| West Virginia..... | 10 | 313 | 60.1 | .354 | 21.28 |
| Wisconsin..... | 19 | 1,111 | 59.6 | .322 | 19.19 |
| Total..... | 314 | 22,026 | 56.9 | .303 | 17.24 |

Table 4 shows average full-time hours per week, earnings per hour, and full-time earnings per week for the employees in all occupations in the industry in the mills covered in each State and in all States in 1925 and 1928.

Average full-time hours per week in 1925 in various States ranged from 48.2 to 62.1 and in 1928 from 48 to 61.3. All the States averaged 58.1 hours in 1925 and 56.6 hours in 1928.

Average earnings per hour in the various States in 1925 ranged from 22 cents to 53.9 cents and in 1928 from 22.7 cents to 56.6 cents. The average for all States was 35.7 cents in 1925 and 37.1 cents in 1928.

Average full-time earnings per week for the various States in 1925 ranged from \$13.62 to \$28.66 and in 1928 from \$13.67 to \$28.61. All the States combined averaged \$20.74 in 1925 and \$21.00 in 1928.

The average number of wage earners in the sawmill industry in 1925 as reported by the United States Census in each of the 22 States included in the 1928 study are shown in the last column of the table.

TABLE 4.—NUMBER OF ESTABLISHMENTS AND OF WAGE EARNERS, AND AVERAGE HOURS AND EARNINGS, 1925 AND 1928, BY STATES

| State | Year | Number in this survey | | Average full-time hours per week | Average earnings per hour | Average full-time earnings per week | Average number of wage earners reported by the United States Census May-October, 1925 |
|----------------|------|-----------------------|--------------|----------------------------------|---------------------------|-------------------------------------|---|
| | | Estab-lish-ments | Wage earners | | | | |
| Alabama | 1925 | 13 | 3,606 | 61.6 | \$0.236 | \$14.54 | 18,514 |
| | 1928 | 21 | 3,747 | 60.5 | .243 | 14.70 | |
| Arkansas | 1925 | 19 | 4,912 | 60.9 | .285 | 17.36 | 19,841 |
| | 1928 | 15 | 4,250 | 59.2 | .303 | 17.94 | |
| California | 1925 | 9 | 2,706 | 57.2 | .501 | 28.66 | 15,711 |
| | 1928 | 14 | 3,496 | 56.1 | .510 | 28.61 | |
| Florida | 1925 | 14 | 2,938 | 61.1 | .294 | 17.96 | 10,497 |
| | 1928 | 12 | 2,321 | 61.3 | .261 | 16.00 | |
| Georgia | 1925 | 14 | 1,746 | 61.2 | .233 | 14.26 | 9,440 |
| | 1928 | 19 | 1,813 | 59.3 | .244 | 14.47 | |
| Idaho | 1925 | 4 | 1,240 | 48.4 | .510 | 24.68 | 7,028 |
| | 1928 | 5 | 1,769 | 48.0 | .547 | 26.26 | |
| Kentucky | 1925 | 14 | 891 | 59.4 | .327 | 19.42 | 2,570 |
| | 1928 | 9 | 435 | 57.2 | .349 | 19.96 | |
| Louisiana | 1925 | 26 | 6,141 | 62.1 | .288 | 17.88 | 26,163 |
| | 1928 | 18 | 5,214 | 59.4 | .286 | 16.99 | |
| Maine | 1925 | 12 | 1,167 | 58.1 | .349 | 20.28 | 3,476 |
| | 1928 | 12 | 732 | 58.9 | .354 | 20.85 | |
| Michigan | 1925 | 14 | 1,897 | 60.3 | .384 | 23.16 | 11,481 |
| | 1928 | 23 | 2,381 | 59.0 | .387 | 22.83 | |
| Minnesota | 1925 | 4 | 1,983 | 60.8 | .391 | 23.77 | 3,862 |
| | 1928 | 4 | 1,890 | 60.4 | .409 | 24.70 | |
| Mississippi | 1925 | 16 | 4,760 | 60.9 | .285 | 17.36 | 23,418 |
| | 1928 | 16 | 4,835 | 59.6 | .290 | 17.28 | |
| Montana | 1925 | 4 | 979 | 51.0 | .490 | 24.99 | 2,319 |
| | 1928 | 5 | 1,142 | 50.7 | .488 | 24.74 | |
| North Carolina | 1925 | 19 | 2,376 | 61.3 | .247 | 15.14 | 10,485 |
| | 1928 | 23 | 2,030 | 60.2 | .260 | 15.65 | |
| Oregon | 1925 | 10 | 4,068 | 48.2 | .539 | 25.98 | 19,769 |
| | 1928 | 14 | 4,362 | 48.4 | .566 | 27.39 | |
| South Carolina | 1925 | 11 | 2,146 | 61.9 | .220 | 13.62 | 9,334 |
| | 1928 | 10 | 1,962 | 60.2 | .227 | 13.67 | |
| Tennessee | 1925 | 20 | 1,731 | 58.6 | .304 | 17.81 | 8,071 |
| | 1928 | 20 | 1,646 | 58.2 | .320 | 18.62 | |
| Texas | 1925 | 9 | 2,602 | 61.6 | .300 | 18.48 | 11,023 |
| | 1928 | 11 | 2,502 | 58.3 | .299 | 17.43 | |
| Virginia | 1925 | 12 | 1,629 | 60.5 | .277 | 16.76 | 6,871 |
| | 1928 | 18 | 850 | 59.7 | .295 | 17.61 | |
| Washington | 1925 | 22 | 6,913 | 48.4 | .530 | 25.65 | 36,296 |
| | 1928 | 21 | 7,283 | 48.1 | .552 | 26.55 | |
| West Virginia | 1925 | 14 | 1,220 | 60.3 | .396 | 23.88 | 4,160 |
| | 1928 | 10 | 828 | 60.1 | .409 | 24.58 | |
| Wisconsin | 1925 | 14 | 2,769 | 60.1 | .373 | 22.42 | 12,339 |
| | 1928 | 19 | 2,540 | 59.6 | .363 | 21.63 | |
| Total | 1925 | 299 | 61,193 | 58.1 | .357 | 20.74 | 272,640 |
| | 1928 | 319 | 58,007 | 56.6 | .371 | 21.00 | |

Wages and Hours in the Boot and Shoe Industry, 1928

A SUMMARY of the results of the 1928 study recently completed by the Bureau of Labor Statistics of wages and hours of labor in the boot and shoe industry in the United States is presented in this article. The principal figures presented are average full-time hours per week, average earnings per hour, and average full-time earnings per week for 28,312 male and 20,346 female wage earners in 157 representative establishments in 14 States. These States were the most important in number of wage earners in the industry in 1925, according to the United States Census of Manufactures, and the wage earners employed in them form more than 96 per cent of all the workers in the industry in the United States. The 48,658 employees covered in the 1928 study represent 24.5 per cent of the total number in the 14 States in 1925 and 23.5 per cent of all in the United States in that year.

The 1928 survey, like those of former years, covered representative establishments in each State, and was limited to establishments whose principal products were men's, women's, or children's shoes made by the welt, McKay, or turn process. Data were not included from establishments whose main or entire product was nailed or pegged shoes, or specialties such as slippers, leggings, felt or rubber footwear, etc. Wherever possible the data were obtained from the same establishments in 1928 as in 1926. In some instances, however, these plants were not operating, had moved to some other locality, or had ceased to be representative.

The 1928 industry averages of full-time hours per week, earnings per hour, and full-time earnings per week, and like figures for each of the specified years 1910 to 1926, with index numbers of these averages, are presented in Table 1. The 1928 figures in greater detail will be published later in bulletin form.

Wages changed very little between 1926 and 1928. Average earnings per hour, all occupations combined, increased from 52.8 cents per hour in 1926 to 53 cents in 1928. Average full-time hours increased from 49 to 49.1. Average full-time earnings per week increased from \$25.87 in 1926 to \$26.02 in 1928.

An examination of Table 1 shows that 1920 was the peak wage year. The average earnings per hour for all employees in that year were 55.9 cents per hour. There was a decrease of 5.8 cents per hour between 1920 and 1922. Since the depression period, which occurred immediately after the peak in 1920, each year has shown a steady increase. Due to the increase in hours of labor weekly earnings on full time have increased by a slightly larger percentage than have hourly earnings. The average full-time earnings per week in 1922 were \$24.45, while the corresponding figure in 1928 was \$26.02.

TABLE 1.—AVERAGE HOURS AND EARNINGS, AND INDEX NUMBERS THEREOF, IN THE BOOT AND SHOE INDUSTRY, ALL OCCUPATIONS COMBINED, 1910 TO 1928

| Year | Number of establishments | Number of wage earners | Average full-time hours per week | Average earnings per hour | Average full-time earnings per week | Index numbers (1913=100) of— | | |
|----------------------------|--------------------------|------------------------|----------------------------------|---------------------------|-------------------------------------|------------------------------|-------------------|-----------------------------|
| | | | | | | Full-time hours per week | Earnings per hour | Full-time earnings per week |
| Selected occupations only: | | | | | | | | |
| 1910..... | 60 | 10,581 | 56.5 | \$0.286 | \$16.07 | 102.7 | 92.0 | 94.1 |
| 1911..... | 81 | 15,028 | 56.3 | .292 | 16.37 | 102.4 | 93.9 | 95.8 |
| 1912..... | 81 | 19,405 | 55.5 | .288 | 15.91 | 100.9 | 92.6 | 93.2 |
| 1913..... | 88 | 19,911 | 55.0 | .311 | 17.08 | 100.0 | 100.0 | 100.0 |
| 1914 ¹ | 91 | 18,567 | 54.6 | .314 | 17.11 | 99.3 | 101.0 | 100.2 |
| All occupations: | | | | | | | | |
| 1914 ¹ | 91 | 49,376 | 54.7 | .243 | 13.26 | 99.3 | 100.8 | 100.2 |
| 1916..... | 136 | 60,692 | 54.6 | .259 | 14.11 | 99.1 | 107.5 | 106.6 |
| 1918..... | 143 | 58,321 | 52.3 | .336 | 17.54 | 94.9 | 139.7 | 132.5 |
| 1920..... | 117 | 51,247 | 48.6 | .559 | 26.97 | 88.2 | 232.0 | 203.7 |
| 1922..... | 104 | 47,361 | 48.7 | .501 | 24.45 | 88.4 | 207.9 | 184.7 |
| 1924..... | 106 | 45,460 | 49.0 | .516 | 25.28 | 88.9 | 214.1 | 190.9 |
| 1926..... | 154 | 52,697 | 49.0 | .528 | 25.87 | 88.9 | 219.1 | 195.4 |
| 1928..... | 157 | 48,658 | 49.1 | .530 | 26.02 | 89.2 | 220.3 | 196.6 |

¹ 2 sets of averages are shown for 1914 for the industry—1 for *selected occupations* and the other for *all occupations*, in the industry. The 1910 to 1914 averages for selected occupations only are comparable 1 year with another, as are those for all occupations 1 year with another from 1914 to 1928.

The wage studies made by the bureau in this and other industries prior to 1914 were, on account of lack of funds and of time necessary to collect and compile wage reports, limited to certain major occupations. The figures in Table 1 for the years 1910 to 1914, therefore, are for selected occupations only, but those for the years 1914 to 1928 are for the wage earners in all occupations in the industry. Two sets of figures are shown for 1914—one for 18,567 employees in the selected occupations in 91 establishments, and the other for 49,376 employees in all occupations in the same establishments.

Average full-time hours per week for employees in all occupations in the industry in 1914 were one-tenth of an hour per week more, and average earnings were 7.1 cents per hour or \$3.85 per week less than for those in the selected occupations only.

Index numbers are shown in Table 1 (1913 average = 100 per cent) for the purpose of making ready comparison one year with another for the entire period from 1910 to 1928. Those for the selected occupations for each of the years from 1910 to 1914 are simple percentages with the 1913 average as the base. Those for all occupations for each of the years from 1914 to 1928 are as computed by increasing or decreasing the 1914 index for selected occupations in proportion to the increase or decrease in the average for all occupations between 1914 and the specified succeeding year.

Average full-time hours per week decreased gradually from an index of 102.7 in 1910 to 88.2 in 1920, then increased to 88.9 in 1924 and 1926, and to 89.2 in 1928. The decrease between 1913 and 1920 was 11.8 per cent. The increase between 1920 and 1928 was 1.1 per cent.

Average earnings per hour increased from an index of 92.0 in 1910 to 232.0 in 1920; decreased to 207.9 in 1922; increased to 214.1 in 1924, to 219.1 in 1926, and to 220.3 in 1928. The increase between 1913

and 1920 was 132 per cent, and the decrease between 1920 and 1928 was 5 per cent.

Average full-time earnings per week increased from an index of 94.1 in 1910 to 95.8 in 1911; decreased to 93.2 in 1912; increased to 203.7 in 1920; decreased to 184.7 in 1922; and increased to 196.6 in 1928. The increase between 1913 and 1920 was 103.7 per cent, and the net decrease between 1920 and 1928 was 3.5 per cent. The difference in the trend as between average full-time earnings per week and average earnings per hour was due to the changes from year to year in average full-time hours per week.

Table 2 shows 1926 and 1928 average full-time hours per week, earnings per hour, and full-time earnings per week for all males and all females separately in each of the selected major occupations in the industry and for both sexes combined in all occupations.

Referring to the totals at the end of the table it is seen that the average full-time hours of males in all occupations combined were 49 in 1926 and 1928 and that those of females increased from 49 in 1926 to 49.2 in 1928. During the same period, average earnings per hour for males increased from 62.2 to 62.5 cents and those for females decreased from 40.1 to 39.7 cents per hour. Average full-time earnings per week of males increased from \$30.48 to \$30.63 and those of females decreased from \$19.65 to \$19.53.

In 1926 average full-time hours per week of males in the various occupations ranged from 45 for folders to 50.8 for cementers and doublers, and those of females from 48.2 for machine heel builders, to 52.5 for outsole or insole rounders. The 1928 averages for males ranged from 45.4 for folders to 52 for machine turn lasters and of females from 48.1 for machine heel builders to 52 for hand heel builders.

Average earnings per hour in 1926 of males in the various occupations ranged from 35.1 cents for lacers (before packing) to 95.7 cents for folders, and of females from 29.8 cents for tack pullers to 59.2 cents for outsole or insole rounders. In 1928 these averages of males ranged from 37.8 cents for lacers (before packing) to 89 cents for Goodyear welters, and of females from 31.8 cents for table workers to 50.5 cents per hour for vampers.

Average full-time earnings per week of males in 1926 ranged from \$17.09 for lacers (before packing) to \$45.68 for Goodyear welters, and of females from \$14.60 for tack pullers to \$31.08 for outsole or insole rounders. In 1928 these averages of males ranged from \$18.22 for lacers (before packing) to \$43.61 for Goodyear welters, and of females from \$15.36 for table workers to \$25 for assemblers for the pulling-over machine.

TABLE 2.—AVERAGE HOURS AND EARNINGS, 1926 AND 1928, BY OCCUPATIONS

| Department and occupation | Sex | Number of establishments | | Number of employees | | Average full-time hours per week | | Average earnings per hour | | Average full-time earnings per week | |
|---|-----|--------------------------|------|---------------------|-------|----------------------------------|------|---------------------------|---------|-------------------------------------|---------|
| | | 1926 | 1928 | 1926 | 1928 | 1926 | 1928 | 1926 | 1928 | 1926 | 1928 |
| Cutting department | | | | | | | | | | | |
| Cutters, vamp and whole shoe, hand. | M. | 108 | 110 | 2,129 | 1,777 | 48.9 | 48.6 | \$0.808 | \$0.824 | \$39.51 | \$40.05 |
| Cutters, vamp and whole shoe, machine. | M. | 54 | 59 | 782 | 882 | 49.4 | 48.7 | .658 | .669 | 32.51 | 32.58 |
| | F. | 15 | 10 | 58 | 43 | 49.9 | 50.3 | .501 | .471 | 25.00 | 23.69 |
| Cutters, trimmings, hand | M. | 95 | 101 | 837 | 733 | 49.3 | 48.9 | .516 | .530 | 25.44 | 25.92 |
| | F. | 9 | 6 | 26 | 19 | 49.2 | 49.7 | .404 | .363 | 19.88 | 18.04 |
| Cutters, trimmings, machine | M. | 47 | 50 | 173 | 259 | 49.8 | 49.9 | .439 | .436 | 21.86 | 21.76 |
| | F. | 18 | 9 | 74 | 36 | 49.0 | 49.4 | .378 | .372 | 18.52 | 18.38 |
| Skivers, upper | M. | 37 | 34 | 96 | 98 | 48.4 | 48.1 | .668 | .653 | 32.33 | 31.41 |
| | F. | 113 | 110 | 552 | 541 | 48.9 | 49.1 | .486 | .458 | 23.77 | 22.49 |
| Cutters, linings, hand | M. | 85 | 91 | 373 | 338 | 49.1 | 48.7 | .642 | .649 | 31.52 | 31.61 |
| | F. | 6 | 3 | 42 | 6 | 48.9 | 49.7 | .307 | .416 | 15.01 | 20.68 |
| Cutters, linings, machine | M. | 54 | 54 | 197 | 179 | 49.0 | 49.2 | .523 | .566 | 25.63 | 27.85 |
| | F. | | 4 | | 7 | | 49.7 | | .334 | | 16.60 |
| Sole leather department | | | | | | | | | | | |
| Cutters, outsole | M. | 70 | 60 | 273 | 285 | 48.6 | 49.3 | .716 | .716 | 34.80 | 35.30 |
| Cutters, insole | M. | 43 | 54 | 217 | 349 | 48.8 | 49.2 | .640 | .644 | 31.23 | 31.68 |
| Rounders, outsole or insole | M. | 103 | 89 | 182 | 166 | 49.1 | 49.8 | .629 | .627 | 30.88 | 31.22 |
| | F. | 2 | 1 | 4 | (1) | 52.5 | (1) | .592 | (1) | 31.08 | (1) |
| Channelers, outsole or insole | M. | 100 | 93 | 199 | 193 | 48.9 | 49.5 | .709 | .681 | 34.67 | 33.71 |
| Cutters, top and heel lifts, machine. | M. | 32 | 33 | 106 | 131 | 48.5 | 48.4 | .515 | .517 | 24.98 | 25.02 |
| Heel builders, hand | M. | 10 | 11 | 18 | 32 | 49.8 | 51.6 | .483 | .388 | 24.05 | 20.02 |
| | F. | 8 | 5 | 19 | 23 | 50.0 | 52.0 | .500 | .403 | 25.00 | 20.96 |
| Heel builders, machine | M. | 24 | 23 | 47 | 97 | 48.7 | 48.7 | .527 | .498 | 25.66 | 24.25 |
| | F. | 18 | 13 | 93 | 124 | 48.2 | 48.1 | .466 | .453 | 22.46 | 21.79 |
| Fitting or stitching department | | | | | | | | | | | |
| Stampers, linings or uppers | M. | 15 | 7 | 34 | 15 | 49.2 | 48.0 | .434 | .621 | 21.35 | 29.81 |
| | F. | 121 | 123 | 670 | 570 | 48.8 | 48.9 | .386 | .400 | 18.84 | 19.56 |
| Cementers and doublers, hand and machine. | M. | 18 | 5 | 42 | 9 | 50.8 | 46.2 | .374 | .636 | 19.00 | 29.38 |
| | F. | 118 | 124 | 1,426 | 1,318 | 49.3 | 49.3 | .340 | .330 | 16.76 | 16.27 |
| Folders, hand and machine | M. | 10 | 11 | 61 | 51 | 45.0 | 45.4 | .957 | .808 | 43.07 | 36.68 |
| | F. | 121 | 119 | 1,002 | 928 | 48.7 | 48.8 | .453 | .416 | 22.06 | 20.30 |
| Perforators | M. | 12 | 18 | 30 | 34 | 48.2 | 48.3 | .614 | .648 | 29.59 | 31.30 |
| | F. | 102 | 96 | 372 | 269 | 49.5 | 49.4 | .441 | .424 | 21.83 | 20.95 |
| Tip stitchers | F. | 84 | 62 | 327 | 260 | 48.7 | 48.8 | .480 | .440 | 23.38 | 21.47 |
| Closers or seamers | M. | 7 | 8 | 21 | 16 | 47.9 | 47.8 | .633 | .624 | 30.32 | 29.83 |
| | F. | 119 | 117 | 413 | 379 | 49.3 | 49.5 | .403 | .407 | 19.87 | 20.15 |
| Seam rubbers, hand and machine. | M. | 14 | 13 | 21 | 20 | 48.1 | 48.0 | .481 | .408 | 23.14 | 19.58 |
| | F. | 62 | 50 | 100 | 106 | 48.9 | 49.3 | .341 | .346 | 16.67 | 17.06 |
| Lining makers | F. | 124 | 129 | 1,170 | 1,046 | 49.3 | 49.2 | .413 | .398 | 20.36 | 19.58 |
| Closers-on | F. | 13 | 3 | 27 | 7 | 50.3 | 49.1 | .336 | .382 | 16.90 | 18.76 |
| Top stitchers | M. | 27 | 30 | 90 | 132 | 47.1 | 47.9 | .773 | .830 | 36.41 | 39.76 |
| | F. | 121 | 124 | 1,469 | 1,399 | 49.3 | 49.4 | .486 | .451 | 23.96 | 22.28 |
| Binders | F. | 88 | 92 | 461 | 534 | 49.2 | 49.2 | .560 | .492 | 27.55 | 24.21 |
| Buttonhole makers | F. | 65 | 57 | 110 | 81 | 49.1 | 49.2 | .444 | .401 | 21.80 | 19.73 |
| Button fasteners | F. | 49 | 30 | 80 | 48 | 50.0 | 49.8 | .389 | .352 | 19.45 | 17.53 |
| Eyeleters | M. | 39 | 36 | 74 | 59 | 49.0 | 48.8 | .557 | .588 | 27.29 | 28.09 |
| | F. | 66 | 62 | 128 | 110 | 48.7 | 49.7 | .473 | .435 | 23.04 | 21.62 |
| Vampers | M. | 63 | 54 | 294 | 270 | 48.2 | 48.2 | .741 | .727 | 35.72 | 35.04 |
| | F. | 123 | 119 | 1,170 | 1,022 | 49.1 | 49.3 | .531 | .505 | 26.07 | 24.90 |
| Barrers | F. | 57 | 39 | 96 | 57 | 49.5 | 49.5 | .389 | .393 | 19.26 | 19.45 |
| Tongue stitchers | F. | 68 | 65 | 223 | 203 | 48.8 | 49.0 | .401 | .386 | 19.57 | 18.91 |
| Fancy stitchers | M. | 16 | 20 | 46 | 135 | 47.4 | 47.2 | .763 | .778 | 36.17 | 36.72 |
| | F. | 112 | 124 | 2,398 | 2,534 | 49.4 | 49.4 | .452 | .423 | 22.33 | 20.90 |
| Back-stay stitchers | F. | 85 | 77 | 337 | 279 | 48.8 | 49.1 | .433 | .419 | 21.13 | 20.57 |
| Table workers | F. | 98 | 88 | 893 | 672 | 48.4 | 48.3 | .303 | .318 | 14.67 | 15.36 |
| Lacers (before lasting) | M. | 7 | 6 | 10 | 6 | 48.6 | 49.7 | .356 | .428 | 17.30 | 21.27 |
| | F. | 72 | 83 | 112 | 128 | 48.9 | 49.3 | .386 | .373 | 18.88 | 18.39 |
| Lasting department | | | | | | | | | | | |
| Last pickers or sorters | M. | 106 | 105 | 291 | 245 | 49.2 | 49.3 | .491 | .477 | 24.16 | 23.52 |
| Assemblers, for pulling-over machine. | M. | 113 | 116 | 541 | 537 | 49.1 | 49.0 | .596 | .577 | 29.26 | 28.27 |
| | F. | 9 | 10 | 36 | 26 | 49.6 | 49.9 | .422 | .501 | 20.93 | 25.00 |
| Pullers-over, hand | M. | 11 | 13 | 47 | 32 | 47.5 | 48.4 | .828 | .710 | 39.33 | 34.36 |
| Pullers-over, machine | M. | 121 | 120 | 576 | 537 | 49.2 | 49.2 | .766 | .740 | 37.69 | 36.41 |
| Side lasters, hand | M. | 38 | 31 | 287 | 128 | 47.8 | 48.2 | .740 | .690 | 35.37 | 33.26 |
| Side lasters, machine | M. | 93 | 104 | 616 | 660 | 49.5 | 49.3 | .675 | .661 | 33.41 | 32.59 |
| Bed machine operators | M. | 121 | 117 | 1,279 | 1,207 | 49.1 | 49.2 | .700 | .682 | 34.37 | 33.55 |

¹ Data included in total.

TABLE 2.—AVERAGE HOURS AND EARNINGS, 1926 AND 1928, BY OCCUPATIONS—Contd.

| Department and occupation | Sex | Number of establishments | | Number of employees | | Average full-time hours per week | | Average earnings per hour | | Average full-time earnings per week | |
|--|-----|--------------------------|------|---------------------|--------|----------------------------------|------|---------------------------|---------|-------------------------------------|---------|
| | | 1926 | 1928 | 1926 | 1928 | 1926 | 1928 | 1926 | 1928 | 1926 | 1928 |
| Lasting department—C on. | | | | | | | | | | | |
| Hand-method lasting machine operators. | M. | 14 | 9 | 68 | 101 | 48.9 | 47.2 | \$0.700 | \$0.856 | \$34.23 | \$40.40 |
| Turn lasters, hand | M. | 35 | 31 | 726 | 706 | 47.7 | 47.9 | .870 | .831 | 41.50 | 39.80 |
| Turn lasters, machine | M. | 5 | 6 | 86 | 50 | 48.3 | 52.0 | .835 | .575 | 40.33 | 29.90 |
| Turn sewers | M. | 28 | 28 | 66 | 66 | 48.9 | 49.6 | .857 | .873 | 41.91 | 43.30 |
| Tack pullers | M. | 98 | 95 | 321 | 284 | 49.3 | 49.2 | .462 | .448 | 22.78 | 22.04 |
| | F. | 3 | 1 | 8 | (1) | 49.0 | (1) | .298 | (1) | 14.60 | (1) |
| Bottoming department | | | | | | | | | | | |
| Goodyear welters | M. | 92 | 86 | 358 | 328 | 48.7 | 49.1 | .938 | .890 | 45.68 | 43.61 |
| Welt beaters and slashers | M. | 80 | 63 | 147 | 118 | 48.8 | 49.9 | .569 | .508 | 27.77 | 25.35 |
| Bottom fillers, hand and machine. | M. | 82 | 81 | 158 | 139 | 49.2 | 49.3 | .507 | .512 | 24.94 | 25.24 |
| Sole cementers, hand and machine. | M. | 70 | 61 | 145 | 110 | 48.9 | 49.1 | .456 | .425 | 22.30 | 20.87 |
| | F. | 6 | 5 | 9 | 9 | 48.4 | 50.8 | .317 | .342 | 15.34 | 17.37 |
| Sole layers, hand and machine | M. | 106 | 113 | 284 | 237 | 49.1 | 49.0 | .636 | .656 | 31.23 | 32.14 |
| Rough rounders | M. | 91 | 84 | 241 | 226 | 48.8 | 48.7 | .825 | .815 | 40.26 | 39.69 |
| Channel openers and closers | M. | 90 | 92 | 303 | 287 | 49.4 | 49.4 | .508 | .512 | 25.10 | 25.29 |
| | F. | 20 | 16 | 68 | 43 | 48.9 | 48.8 | .444 | .417 | 21.71 | 20.35 |
| Goodyear stitchers | M. | 98 | 89 | 517 | 461 | 48.9 | 48.9 | .776 | .766 | 37.95 | 37.46 |
| McKay sewers | M. | 51 | 50 | 159 | 138 | 50.1 | 49.4 | .687 | .755 | 34.42 | 37.30 |
| Stitch separators | M. | 55 | 55 | 111 | 117 | 48.8 | 49.1 | .528 | .533 | 25.77 | 26.17 |
| Levelers | M. | 119 | 122 | 345 | 318 | 49.4 | 49.3 | .655 | .648 | 32.36 | 31.95 |
| Heelers, leather | M. | 102 | 92 | 319 | 248 | 49.1 | 49.0 | .729 | .764 | 35.79 | 37.44 |
| Heelers, wood | M. | 73 | 80 | 713 | 798 | 48.8 | 49.4 | .823 | .829 | 40.16 | 40.95 |
| Heel trimmers or shavers | M. | 103 | 94 | 234 | 198 | 49.2 | 49.3 | .736 | .716 | 36.21 | 35.30 |
| Heel breasters | M. | 78 | 72 | 124 | 116 | 49.1 | 48.8 | .631 | .618 | 30.98 | 30.16 |
| Edge trimmers | M. | 127 | 131 | 808 | 754 | 49.2 | 49.1 | .785 | .764 | 38.62 | 37.51 |
| Sluggers | M. | 30 | 31 | 58 | 39 | 49.0 | 49.1 | .582 | .618 | 28.52 | 30.34 |
| Finishing department | | | | | | | | | | | |
| Buffers | M. | 124 | 122 | 434 | 356 | 49.4 | 49.5 | .640 | .651 | 31.62 | 32.22 |
| Edge setters | M. | 129 | 133 | 765 | 738 | 49.1 | 49.1 | .766 | .755 | 37.61 | 37.07 |
| Heel scourers | M. | 104 | 97 | 342 | 312 | 49.2 | 49.1 | .623 | .589 | 30.65 | 28.92 |
| Heel burnishers | M. | 104 | 91 | 275 | 236 | 49.3 | 49.3 | .607 | .581 | 29.93 | 28.64 |
| Bottom finishers | M. | (2) | 104 | (2) | 309 | (2) | 48.9 | (2) | .632 | (2) | 30.90 |
| Brushers | M. | 88 | 78 | 248 | 189 | 49.2 | 49.4 | .450 | .454 | 22.14 | 22.43 |
| | F. | 18 | 13 | 46 | 36 | 50.1 | 49.5 | .416 | .336 | 20.84 | 16.63 |
| Shoe cleaners | M. | 39 | 42 | 116 | 131 | 48.3 | 48.3 | .526 | .493 | 25.41 | 23.81 |
| | F. | 29 | 26 | 66 | 77 | 48.6 | 49.0 | .338 | .334 | 16.43 | 16.37 |
| Lest pullers | M. | 112 | 119 | 275 | 226 | 49.5 | 49.2 | .494 | .510 | 24.45 | 25.09 |
| Treers | M. | 114 | 118 | 1,088 | 1,072 | 49.2 | 49.2 | .611 | .624 | 30.06 | 30.70 |
| | F. | 43 | 36 | 302 | 239 | 49.0 | 49.3 | .419 | .386 | 20.53 | 19.03 |
| Repairers | M. | 53 | 48 | 128 | 134 | 48.2 | 48.5 | .594 | .569 | 28.63 | 27.60 |
| | F. | 110 | 120 | 925 | 832 | 49.0 | 49.4 | .388 | .377 | 19.01 | 18.62 |
| Dressers | M. | 22 | 16 | 49 | 24 | 49.0 | 48.5 | .428 | .487 | 20.97 | 23.62 |
| | F. | 81 | 77 | 317 | 290 | 49.1 | 49.3 | .377 | .375 | 18.51 | 18.49 |
| Sock liners | M. | 17 | 12 | 30 | 23 | 50.1 | 49.7 | .380 | .433 | 19.04 | 21.52 |
| | F. | 115 | 116 | 350 | 305 | 48.9 | 49.0 | .378 | .389 | 18.48 | 19.06 |
| Lacers (before packing) | M. | 10 | 7 | 21 | 10 | 48.7 | 48.2 | .351 | .378 | 17.09 | 18.22 |
| | F. | 86 | 90 | 194 | 204 | 48.9 | 49.2 | .326 | .320 | 15.94 | 15.74 |
| Packers | M. | 34 | 18 | 110 | 31 | 49.4 | 49.6 | .433 | .443 | 21.39 | 21.97 |
| | F. | 112 | 125 | 387 | 379 | 48.7 | 48.7 | .377 | .388 | 18.36 | 18.90 |
| Other employees | M. | 154 | 156 | 9,764 | 9,070 | 49.0 | 49.0 | .501 | .513 | 24.55 | 25.14 |
| | F. | 132 | 141 | 6,212 | 5,155 | 48.8 | 49.2 | .335 | .361 | 16.35 | 17.76 |
| All occupations | M. | 154 | 157 | 29,925 | 28,312 | 49.0 | 49.0 | .622 | .625 | 30.48 | 30.63 |
| | F. | 135 | 144 | 22,772 | 20,346 | 49.0 | 49.2 | .401 | .397 | 19.65 | 19.53 |
| All occupations, male and female | | 154 | 157 | 52,697 | 48,658 | 49.0 | 49.1 | .528 | .530 | 25.87 | 26.02 |

¹ Data included in total.² Data included with "Other employees."

Table 3 presents, for each State, 1928 average full-time hours per week, earnings per hour, and full-time earnings per week of employees in 14 selected occupations for which data are presented in Table 2. Of the 14 occupations for which data are shown 7 include both sexes. These occupations cover 27.9 per cent of the males and 31.6 per cent of the females included in the study.

In the first occupation shown, for instance, that of cutters, average full-time hours ranged in the different States from 46.7 to 53.3 per week. The average for all States was 48.6 per week. Average earnings per hour ranged from 57.0 to 97.4 cents, while the average for all States was 82.4 cents per hour. Average full-time earnings per week ranged by States from \$27.76 to \$45.68 and the average for all States was \$40.05 per week.

TABLE 3.—AVERAGE HOURS AND EARNINGS FOR 14 SELECTED OCCUPATIONS, 1928, BY SEX AND STATE

| State | Number of establishments | Number of employees | Average full-time hours per week | Average earnings per hour | Average full-time earnings per week | Number of establishments | Number of employees | Average full-time hours per week | Average earnings per hour | Average full-time earnings per week |
|---|--------------------------|---------------------|----------------------------------|---------------------------|-------------------------------------|---|---------------------|----------------------------------|---------------------------|-------------------------------------|
| Cutters, vamp and whole shoe, hand, male | | | | | | Skivers, upper, male | | | | |
| Illinois..... | 6 | 143 | 48.6 | \$0.845 | \$41.67 | 3 | 7 | 51.9 | \$0.300 | \$15.57 |
| Maine..... | 5 | 89 | 53.3 | .662 | 35.22 | 3 | 4 | 51.0 | .464 | 23.66 |
| Maryland and Virginia..... | 5 | 69 | 48.7 | .570 | 27.76 | 3 | 6 | 50.4 | .454 | 22.88 |
| Massachusetts..... | 38 | 640 | 48.0 | .895 | 42.96 | 14 | 52 | 48.0 | .674 | 32.35 |
| Michigan..... | 1 | (1) | (1) | (1) | (1) | | | | | |
| Minnesota..... | 4 | 31 | 48.9 | .616 | 30.12 | | | | | |
| Missouri..... | 3 | 62 | 48.0 | .950 | 45.60 | | | | | |
| New Hampshire..... | 5 | 75 | 49.1 | .699 | 34.32 | 1 | (1) | (1) | (1) | (1) |
| New Jersey..... | 4 | 45 | 46.7 | .755 | 35.26 | | | | | |
| New York..... | 18 | 267 | 46.9 | .974 | 45.68 | 8 | 24 | 45.8 | .836 | 38.29 |
| Ohio..... | 4 | 119 | 49.9 | .866 | 43.21 | | | | | |
| Pennsylvania..... | 8 | 131 | 50.1 | .597 | 29.91 | 1 | (1) | (1) | (1) | (1) |
| Wisconsin..... | 9 | 104 | 49.3 | .697 | 34.36 | 1 | (1) | (1) | (1) | (1) |
| Total..... | 110 | 1,777 | 48.6 | .824 | 40.05 | 34 | 98 | 48.1 | .653 | 31.41 |
| Skivers, upper, female | | | | | | Cementers, and doublers, hand and machine, male | | | | |
| Illinois..... | 8 | 45 | 49.0 | \$0.499 | \$24.45 | 1 | (1) | (1) | (1) | (1) |
| Maine..... | 6 | 18 | 52.2 | .508 | 26.52 | | | | | |
| Maryland and Virginia..... | 3 | 17 | 48.8 | .358 | 17.47 | | | | | |
| Massachusetts..... | 26 | 107 | 47.9 | .542 | 25.96 | 1 | (1) | (1) | (1) | (1) |
| Michigan..... | 4 | 6 | 49.7 | .298 | 14.81 | | | | | |
| Minnesota..... | 4 | 8 | 49.9 | .358 | 17.86 | | | | | |
| Missouri..... | 7 | 56 | 50.5 | .391 | 19.75 | | | | | |
| New Hampshire..... | 9 | 47 | 49.0 | .417 | 20.43 | | | | | |
| New Jersey..... | 3 | 12 | 46.0 | .518 | 23.83 | | | | | |
| New York..... | 15 | 94 | 48.5 | .474 | 22.99 | 3 | 6 | 45.3 | \$0.730 | \$33.07 |
| Ohio..... | 7 | 42 | 49.9 | .414 | 20.66 | | | | | |
| Pennsylvania..... | 8 | 37 | 50.4 | .448 | 22.58 | | | | | |
| Wisconsin..... | 10 | 52 | 48.9 | .414 | 20.24 | | | | | |
| Total..... | 110 | 541 | 49.1 | .458 | 22.49 | 5 | 9 | 46.2 | .636 | 29.38 |
| Cementers, and doublers, hand and machine, female | | | | | | Lining makers (including closers, side and top stitchers), female | | | | |
| Illinois..... | 8 | 113 | 50.6 | \$0.296 | \$14.98 | 8 | 131 | 50.1 | \$0.378 | \$18.94 |
| Maine..... | 5 | 92 | 53.6 | .286 | 15.33 | 6 | 57 | 53.1 | .360 | 19.12 |
| Maryland and Virginia..... | 6 | 54 | 48.7 | .199 | 9.69 | 5 | 34 | 49.2 | .268 | 13.19 |
| Massachusetts..... | 35 | 324 | 48.0 | .397 | 19.06 | 38 | 267 | 47.9 | .470 | 22.51 |
| Michigan..... | 3 | 7 | 49.4 | .286 | 14.13 | 4 | 7 | 49.7 | .329 | 16.35 |
| Minnesota..... | 4 | 11 | 49.6 | .256 | 12.70 | 4 | 14 | 50.3 | .316 | 15.89 |
| Missouri..... | 7 | 134 | 49.9 | .307 | 15.32 | 7 | 124 | 50.4 | .296 | 14.92 |
| New Hampshire..... | 9 | 110 | 49.4 | .311 | 15.36 | 9 | 74 | 49.4 | .385 | 19.02 |
| New Jersey..... | 3 | 22 | 44.8 | .499 | 22.36 | 4 | 15 | 47.1 | .484 | 22.80 |
| New York..... | 18 | 217 | 48.8 | .338 | 16.49 | 18 | 153 | 48.3 | .435 | 21.01 |
| Ohio..... | 7 | 73 | 49.8 | .328 | 16.33 | 7 | 59 | 49.9 | .392 | 19.56 |
| Pennsylvania..... | 8 | 112 | 49.8 | .292 | 14.54 | 8 | 57 | 49.8 | .348 | 17.33 |
| Wisconsin..... | 11 | 49 | 48.9 | .330 | 16.14 | 11 | 54 | 48.4 | .466 | 22.55 |
| Total..... | 124 | 1,318 | 49.3 | .330 | 16.27 | 129 | 1,046 | 49.2 | .398 | 19.58 |

¹ Data included in total.

WAGES AND HOURS—BOOT AND SHOE INDUSTRY

185

TABLE 3.—AVERAGE HOURS AND EARNINGS FOR 14 SELECTED OCCUPATIONS, 1928,
BY SEX AND STATE—Continued

| State | Number of establishments | Number of employees | Average full-time hours per week | Average earnings per hour | Average full-time earnings per week | Number of establishments | Number of employees | Average full-time hours per week | Average earnings per hour | Average full-time weekly earnings |
|----------------------------|--|---------------------|----------------------------------|---------------------------|-------------------------------------|--|---------------------|----------------------------------|---------------------------|-----------------------------------|
| | Top stitchers (including under-trimmers and barber trimmers), male | | | | | Top stitchers (including under-trimmers and barber trimmers), female | | | | |
| Illinois..... | 2 | 13 | 48.0 | \$0.912 | \$43.78 | 8 | 134 | 50.5 | \$0.393 | \$19.85 |
| Maine..... | | | | | | 6 | 78 | 53.4 | .450 | 24.03 |
| Maryland and Virginia..... | 3 | 12 | 50.4 | .475 | 23.94 | 4 | 55 | 48.5 | .263 | 12.76 |
| Massachusetts..... | 12 | 47 | 48.1 | .975 | 46.90 | 38 | 325 | 47.9 | .552 | 26.44 |
| Michigan..... | | | | | | 4 | 16 | 49.5 | .371 | 18.36 |
| Minnesota..... | | | | | | 4 | 14 | 49.4 | .351 | 17.34 |
| Missouri..... | 2 | 4 | 52.0 | .437 | 22.72 | 7 | 193 | 50.7 | .362 | 18.35 |
| New Hampshire..... | 1 | (1) | (1) | (1) | (1) | 8 | 89 | 49.4 | .440 | 21.74 |
| New Jersey..... | 1 | (1) | (1) | (1) | (1) | 3 | 11 | 48.3 | .510 | 24.63 |
| New York..... | 7 | 32 | 45.6 | .839 | 38.26 | 16 | 237 | 48.6 | .499 | 24.25 |
| Ohio..... | | | | | | 7 | 110 | 49.9 | .403 | 20.11 |
| Pennsylvania..... | 2 | 13 | 48.0 | .834 | 40.03 | 8 | 61 | 50.0 | .453 | 22.65 |
| Wisconsin..... | | | | | | 11 | 76 | 48.7 | .519 | 25.28 |
| Total..... | 30 | 132 | 47.9 | .830 | 39.76 | 124 | 1,399 | 49.4 | .451 | 22.28 |
| | Vampers, male | | | | | Vampers, female | | | | |
| Illinois..... | 2 | 17 | 48.0 | \$0.845 | \$40.56 | 8 | 96 | 49.6 | \$0.517 | \$25.64 |
| Maine..... | 4 | 5 | 53.2 | .557 | 29.63 | 5 | 45 | 52.3 | .519 | 27.14 |
| Maryland and Virginia..... | 3 | 8 | 50.4 | .636 | 32.05 | 6 | 33 | 48.7 | .369 | 17.97 |
| Massachusetts..... | 22 | 155 | 48.0 | .736 | 35.33 | 30 | 172 | 48.0 | .628 | 30.14 |
| Michigan..... | | | | | | 4 | 12 | 49.7 | .403 | 20.03 |
| Minnesota..... | 1 | (1) | (1) | (1) | (1) | 4 | 18 | 49.7 | .415 | 20.63 |
| Missouri..... | 1 | (1) | (1) | (1) | (1) | 7 | 141 | 50.6 | .406 | 20.54 |
| New Hampshire..... | 4 | 8 | 50.1 | .497 | 24.90 | 9 | 91 | 49.2 | .502 | 24.70 |
| New Jersey..... | 2 | 5 | 44.0 | .859 | 37.80 | 4 | 18 | 48.1 | .562 | 27.03 |
| New York..... | 10 | 37 | 46.8 | .743 | 34.77 | 17 | 189 | 48.4 | .534 | 25.85 |
| Ohio..... | | | | | | 7 | 87 | 49.9 | .428 | 21.36 |
| Pennsylvania..... | 2 | 15 | 48.0 | .887 | 42.58 | 7 | 45 | 51.0 | .442 | 22.54 |
| Wisconsin..... | 3 | 12 | 49.3 | .643 | 31.70 | 11 | 75 | 48.9 | .545 | 26.65 |
| Total..... | 54 | 270 | 48.2 | .727 | 35.04 | 119 | 1,022 | 49.3 | .505 | 24.90 |
| | Assemblers for pulling-over machine, male | | | | | Assemblers for pulling-over machine, female | | | | |
| Illinois..... | 8 | 55 | 49.6 | \$0.572 | \$28.37 | 1 | (1) | (1) | (1) | (1) |
| Maine..... | 6 | 23 | 52.8 | .531 | 28.04 | 1 | (1) | (1) | (1) | (1) |
| Maryland and Virginia..... | 7 | 28 | 49.0 | .460 | 22.54 | | | | | |
| Massachusetts..... | 28 | 132 | 48.2 | .647 | 31.19 | 4 | 4 | 48.0 | \$0.748 | \$35.90 |
| Michigan..... | 3 | 3 | 50.0 | .490 | 24.50 | | | | | |
| Minnesota..... | 4 | 5 | 50.2 | .661 | 33.18 | | | | | |
| Missouri..... | 7 | 74 | 50.2 | .477 | 23.95 | | | | | |
| New Hampshire..... | 9 | 28 | 49.6 | .582 | 28.87 | 2 | 3 | 51.7 | .416 | 21.51 |
| New Jersey..... | 4 | 19 | 46.3 | .499 | 23.10 | | | | | |
| New York..... | 16 | 92 | 47.5 | .643 | 30.54 | 2 | 17 | 50.0 | .445 | 22.25 |
| Ohio..... | 7 | 30 | 49.9 | .640 | 31.94 | | | | | |
| Pennsylvania..... | 6 | 17 | 51.1 | .498 | 25.45 | | | | | |
| Wisconsin..... | 11 | 31 | 49.4 | .550 | 27.17 | | | | | |
| Total..... | 116 | 537 | 49.0 | .577 | 28.27 | 10 | 26 | 49.9 | .501 | 25.00 |

¹ Data included in total.

TABLE 3.—AVERAGE HOURS AND EARNINGS FOR 14 SELECTED OCCUPATIONS, 1928, BY SEX AND STATE—Continued

| State | Number of establishments | Number of employees | Average full-time hours per week | Average earnings per hour | Average full-time earnings per week | Number of establishments | Number of employees | Average full-time hours per week | Average earnings per hour | Average full-time weekly earnings |
|-----------------------------|--------------------------|---------------------|----------------------------------|---------------------------|-------------------------------------|---|---------------------|----------------------------------|---------------------------|-----------------------------------|
| Bed machine operators, male | | | | | | Turn lasters, hand (including first and second lasters), male | | | | |
| Illinois | 7 | 131 | 49.7 | \$0.675 | \$33.55 | 1 | (1) | (1) | (1) | (1) |
| Maine | 6 | 61 | 52.7 | .576 | 30.36 | | | | | |
| Maryland and Virginia | 6 | 49 | 48.6 | .558 | 27.12 | 2 | 9 | 50.5 | \$0.895 | \$45.20 |
| Massachusetts | 29 | 291 | 48.1 | .731 | 35.16 | 9 | 320 | 48.2 | .836 | 40.30 |
| Michigan | 4 | 8 | 49.5 | .609 | 34.60 | 1 | (1) | (1) | (1) | (1) |
| Minnesota | 4 | 9 | 49.7 | .678 | 33.70 | | | | | |
| Missouri | 7 | 157 | 50.3 | .612 | 30.78 | | | | | |
| New Hampshire | 9 | 82 | 49.5 | .655 | 32.42 | | | | | |
| New Jersey | 3 | 16 | 45.5 | .758 | 34.49 | 2 | 20 | 50.8 | .607 | 30.84 |
| New York | 16 | 221 | 48.2 | .714 | 34.41 | 9 | 167 | 46.4 | .899 | 41.71 |
| Ohio | 7 | 72 | 49.9 | .749 | 37.38 | 3 | 37 | 49.6 | .670 | 33.23 |
| Pennsylvania | 8 | 35 | 50.7 | .639 | 32.40 | 3 | 127 | 48.0 | .833 | 39.98 |
| Wisconsin | 11 | 75 | 49.7 | .725 | 36.03 | 1 | (1) | (1) | (1) | (1) |
| Total | 117 | 1,207 | 49.2 | .682 | 33.55 | 31 | 706 | 47.9 | .831 | 39.80 |
| Goodyear stitchers, male | | | | | | Edge trimmers, male | | | | |
| Illinois | 4 | 33 | 48.4 | \$0.986 | \$47.72 | 8 | 64 | 49.6 | \$0.766 | \$37.99 |
| Maine | 4 | 16 | 51.3 | .679 | 34.83 | 6 | 41 | 53.0 | .612 | 32.44 |
| Maryland and Virginia | 6 | 23 | 48.8 | .688 | 33.57 | 7 | 37 | 48.9 | .568 | 27.78 |
| Massachusetts | 16 | 109 | 48.0 | .762 | 36.58 | 37 | 191 | 48.1 | .875 | 42.09 |
| Michigan | 4 | 7 | 49.7 | .694 | 34.49 | 4 | 6 | 49.7 | .719 | 35.73 |
| Minnesota | 4 | 5 | 49.7 | .800 | 39.76 | 4 | 6 | 49.8 | .643 | 32.02 |
| Missouri | 4 | 33 | 51.5 | .666 | 34.30 | 7 | 73 | 50.1 | .656 | 32.87 |
| New Hampshire | 5 | 35 | 48.5 | .711 | 34.48 | 9 | 54 | 49.4 | .696 | 34.38 |
| New Jersey | 3 | 7 | 46.6 | .882 | 41.10 | 4 | 10 | 47.9 | .747 | 35.78 |
| New York | 15 | 114 | 48.3 | .800 | 38.64 | 20 | 147 | 48.2 | .834 | 40.20 |
| Ohio | 6 | 28 | 49.9 | .794 | 39.62 | 7 | 56 | 49.9 | .720 | 35.93 |
| Pennsylvania | 8 | 22 | 51.0 | .629 | 32.08 | 8 | 29 | 50.3 | .677 | 34.05 |
| Wisconsin | 10 | 29 | 49.8 | .755 | 37.60 | 10 | 40 | 49.5 | .783 | 38.76 |
| Total | 80 | 461 | 48.9 | .766 | 37.46 | 131 | 754 | 49.1 | .764 | 37.51 |
| Edge setters, male | | | | | | Treers, hand and machine, male | | | | |
| Illinois | 8 | 63 | 49.5 | \$0.745 | \$36.88 | 6 | 53 | 50.3 | \$0.513 | \$25.80 |
| Maine | 6 | 44 | 53.3 | .598 | 31.87 | 6 | 77 | 53.2 | .518 | 27.56 |
| Maryland and Virginia | 7 | 27 | 48.8 | .697 | 34.01 | 6 | 40 | 48.7 | .483 | 23.52 |
| Massachusetts | 38 | 186 | 48.1 | .869 | 41.80 | 37 | 397 | 48.2 | .722 | 34.80 |
| Michigan | 4 | 4 | 49.5 | .652 | 32.27 | 4 | 12 | 49.8 | .517 | 25.75 |
| Minnesota | 4 | 10 | 50.0 | .605 | 30.25 | 3 | 9 | 48.7 | .535 | 26.05 |
| Missouri | 7 | 54 | 50.1 | .671 | 33.62 | 6 | 101 | 50.3 | .555 | 27.92 |
| New Hampshire | 9 | 44 | 49.5 | .702 | 34.75 | 9 | 90 | 49.7 | .567 | 28.18 |
| New Jersey | 4 | 15 | 47.7 | .814 | 38.83 | 4 | 17 | 47.1 | .632 | 29.77 |
| New York | 20 | 147 | 48.2 | .774 | 37.31 | 17 | 152 | 48.1 | .685 | 32.95 |
| Ohio | 7 | 69 | 49.9 | .723 | 36.08 | 4 | 45 | 50.0 | .468 | 23.40 |
| Pennsylvania | 8 | 38 | 49.9 | .630 | 31.44 | 8 | 42 | 49.9 | .513 | 25.60 |
| Wisconsin | 11 | 37 | 49.1 | .783 | 38.45 | 8 | 37 | 49.9 | .613 | 30.59 |
| Total | 133 | 738 | 49.1 | .755 | 37.07 | 118 | 1,072 | 49.2 | .624 | 30.70 |

* Data included in total.

TABLE 3.—AVERAGE HOURS AND EARNINGS FOR 14 SELECTED OCCUPATIONS, 1928,
BY SEX AND STATE—Continued

| State | Num- ber of estab- lish- ments | Num- ber of em- ploy- ees | Aver- age full- time hours per week | Aver- age earn- ings per hour | Aver- age full- time earn- ings per week | Num- ber of estab- lish- ments | Num- ber of em- ploy- ees | Aver- age full- time hours per week | Aver- age earn- ings per hour | Aver- age full- time week- ly earn- ings |
|----------------------------|---|--|---|--|---|---|--|---|--|---|
| | Treeers, hand and machine, female | | | | | Repairers (not cobblers) (including tip fixers and scourers), male | | | | |
| Illinois..... | 6 | 62 | 49.6 | \$0.418 | \$20.73 | 4 | 7 | 50.6 | \$0.356 | \$18.01 |
| Maine..... | 1 | (1) | (1) | (1) | (1) | 3 | 4 | 51.0 | .565 | 28.82 |
| Maryland and Virginia..... | 3 | 12 | 50.3 | .295 | 14.84 | 3 | 4 | 50.3 | .534 | 26.86 |
| Massachusetts..... | 3 | 5 | 48.0 | .656 | 31.49 | 11 | 23 | 48.0 | .571 | 27.41 |
| Michigan..... | 1 | (1) | (1) | (1) | (1) | 1 | (1) | (1) | (1) | (1) |
| Minnesota..... | 2 | 4 | 51.4 | .331 | 17.01 | | | | | |
| Missouri..... | 3 | 29 | 48.6 | .309 | 15.02 | | | | | |
| New Hampshire..... | | | | | | 2 | 6 | 48.0 | .358 | 17.18 |
| New Jersey..... | | | | | | 1 | (1) | (1) | (1) | (1) |
| New York..... | 6 | 40 | 48.9 | .386 | 18.88 | 11 | 43 | 47.5 | .670 | 31.83 |
| Ohio..... | 6 | 39 | 49.9 | .411 | 20.51 | 3 | 12 | 50.0 | .504 | 25.20 |
| Pennsylvania..... | | | | | | 5 | 23 | 49.3 | .517 | 25.49 |
| Wisconsin..... | 5 | 45 | 48.8 | .371 | 18.10 | 4 | 9 | 48.9 | .611 | 29.88 |
| Total..... | 36 | 239 | 49.3 | .386 | 19.03 | 48 | 134 | 48.5 | .569 | 27.60 |
| | Repairers (not cobblers) (including tip fixers and scourers), female | | | | | | | | | |
| Illinois..... | 8 | 126 | 50.4 | \$0.312 | \$15.72 | | | | | |
| Maine..... | 6 | 61 | 53.7 | .343 | 18.42 | | | | | |
| Maryland and Virginia..... | 6 | 41 | 48.8 | .252 | 12.30 | | | | | |
| Massachusetts..... | 38 | 207 | 47.9 | .485 | 23.23 | | | | | |
| Michigan..... | 2 | 2 | 50.0 | .237 | 11.85 | | | | | |
| Minnesota..... | 2 | 6 | 49.5 | .305 | 15.10 | | | | | |
| Missouri..... | 7 | 79 | 49.3 | .300 | 14.79 | | | | | |
| New Hampshire..... | 9 | 66 | 49.7 | .404 | 20.08 | | | | | |
| New Jersey..... | 2 | 10 | 51.0 | .307 | 15.66 | | | | | |
| New York..... | 18 | 102 | 48.5 | .411 | 19.93 | | | | | |
| Ohio..... | 7 | 51 | 49.9 | .335 | 16.72 | | | | | |
| Pennsylvania..... | 5 | 50 | 48.9 | .342 | 16.72 | | | | | |
| Wisconsin..... | 10 | 31 | 49.0 | .371 | 18.19 | | | | | |
| Total..... | 120 | 832 | 49.4 | .377 | 18.62 | | | | | |

1 Data included in total.

Table 4 shows for each sex and for both sexes combined the average full-time hours per week, earnings per hour, and full-time earnings per week for all wage earners covered in each State in 1926 and in 1928.

Average full-time hours per week of males in 1926 ranged by States from 46 to 53.4 and of females from 46.6 to 53.4. In 1928 the averages for males ranged from 46.8 to 53.1 and for females from 47.6 to 53.2. The averages for all males and females combined, or for the industry, ranged from 46.2 to 53.4 in 1926 and from 47.1 to 53.1 in 1928.

Average earnings per hour of males in 1926 ranged by States from 47.3 to 70.1 cents, of females from 31.8 to 48.1 cents, and for both sexes combined from 39.8 to 61.2 cents per hour. The 1928 averages for males ranged from 51.1 to 72.3 cents, for females from 30.3 to 47.3 cents, and for both sexes combined from 41.4 to 62.6 cents per hour. Average full-time earnings per week of males in 1926 ranged by States from \$23.74 to \$33.72, of females from \$15.66 to \$22.99, and for both sexes combined from \$21.25 to \$28.83 per week. The 1928 averages for males ranged from \$25.04 to \$34.78, for females from \$14.08 to \$22.66, and for both sexes combined from \$20.70 to \$30.11 per week.

TABLE 4.—AVERAGE HOURS AND EARNINGS, 1926 AND 1928, BY SEX AND STATE

| Sex and State | Number of establishments | | Number of employees | | Average full-time hours per week | | Average earnings per hour | | Average full-time earnings per week | |
|----------------------------|--------------------------|------------|---------------------|---------------|----------------------------------|-------------|---------------------------|-------------|-------------------------------------|--------------|
| | 1926 | 1928 | 1926 | 1928 | 1926 | 1928 | 1926 | 1928 | 1926 | 1928 |
| Males | | | | | | | | | | |
| Illinois..... | 6 | 9 | 1,822 | 2,071 | 48.6 | 49.5 | \$0.642 | \$0.613 | \$31.20 | \$30.34 |
| Maine..... | 6 | 6 | 1,734 | 1,428 | 53.4 | 53.1 | .486 | .516 | 25.95 | 27.40 |
| Maryland and Virginia..... | 8 | 8 | 1,047 | 1,033 | 49.0 | 49.0 | .534 | .511 | 26.17 | 25.04 |
| Massachusetts..... | 40 | 50 | 7,095 | 7,096 | 48.1 | 48.1 | .701 | .723 | 33.72 | 34.78 |
| Michigan..... | 5 | 4 | 299 | 198 | 49.7 | 49.6 | .532 | .558 | 26.44 | 27.68 |
| Minnesota..... | 4 | 4 | 407 | 300 | 50.2 | 50.1 | .473 | .506 | 23.74 | 25.35 |
| Missouri..... | 11 | 11 | 3,604 | 3,506 | 49.3 | 49.6 | .546 | .549 | 26.92 | 27.23 |
| New Hampshire..... | 11 | 10 | 2,052 | 1,761 | 49.3 | 49.2 | .560 | .575 | 27.61 | 28.29 |
| New Jersey..... | 4 | 4 | 393 | 467 | 46.0 | 46.8 | .671 | .657 | 30.87 | 30.75 |
| New York..... | 25 | 21 | 5,915 | 5,388 | 47.7 | 47.9 | .694 | .670 | 33.10 | 32.09 |
| Ohio..... | 7 | 7 | 1,697 | 1,877 | 50.0 | 49.9 | .649 | .607 | 32.45 | 30.29 |
| Pennsylvania..... | 15 | 12 | 2,288 | 1,813 | 50.3 | 50.0 | .538 | .542 | 27.06 | 27.10 |
| Wisconsin..... | 12 | 11 | 1,572 | 1,374 | 49.1 | 49.4 | .598 | .597 | 29.36 | 29.49 |
| Total..... | 154 | 157 | 29,925 | 28,312 | 49.0 | 49.0 | .622 | .625 | 30.48 | 30.63 |
| Females | | | | | | | | | | |
| Illinois..... | 6 | 9 | 1,877 | 2,052 | 48.1 | 50.1 | .410 | .367 | 19.72 | 18.39 |
| Maine..... | 6 | 6 | 1,432 | 1,119 | 53.4 | 53.2 | .349 | .375 | 18.64 | 19.95 |
| Maryland and Virginia..... | 8 | 8 | 665 | 604 | 48.8 | 48.9 | .321 | .288 | 15.66 | 14.08 |
| Massachusetts..... | 28 | 40 | 4,800 | 4,673 | 47.8 | 47.9 | .481 | .473 | 22.99 | 22.66 |
| Michigan..... | 5 | 4 | 253 | 130 | 49.7 | 49.6 | .318 | .325 | 15.80 | 16.12 |
| Minnesota..... | 4 | 4 | 366 | 254 | 50.5 | 50.0 | .366 | .303 | 18.48 | 15.15 |
| Missouri..... | 10 | 10 | 2,827 | 2,450 | 49.2 | 49.8 | .340 | .336 | 16.73 | 16.73 |
| New Hampshire..... | 11 | 10 | 1,610 | 1,311 | 49.5 | 49.3 | .378 | .393 | 18.71 | 19.37 |
| New Jersey..... | 4 | 4 | 281 | 266 | 46.6 | 47.6 | .433 | .439 | 20.18 | 20.90 |
| New York..... | 23 | 20 | 3,892 | 3,556 | 48.3 | 48.5 | .436 | .430 | 21.06 | 20.86 |
| Ohio..... | 7 | 7 | 1,681 | 1,574 | 49.5 | 49.8 | .372 | .355 | 18.41 | 17.68 |
| Pennsylvania..... | 11 | 10 | 1,561 | 1,181 | 50.1 | 49.7 | .335 | .343 | 16.78 | 17.05 |
| Wisconsin..... | 12 | 11 | 1,467 | 1,176 | 48.7 | 48.7 | .390 | .412 | 19.43 | 20.06 |
| Total..... | 135 | 144 | 22,772 | 20,346 | 49.0 | 49.2 | .401 | .397 | 19.65 | 19.53 |
| Males and females | | | | | | | | | | |
| Illinois..... | 6 | 9 | 3,699 | 4,123 | 48.4 | 49.8 | .526 | .491 | 25.46 | 24.45 |
| Maine..... | 6 | 6 | 3,166 | 2,547 | 53.4 | 53.1 | .398 | .455 | 21.25 | 24.16 |
| Maryland and Virginia..... | 8 | 8 | 1,712 | 1,637 | 48.9 | 48.9 | .452 | .428 | 22.10 | 20.93 |
| Massachusetts..... | 40 | 50 | 11,955 | 11,769 | 47.1 | 48.1 | .612 | .626 | 28.83 | 30.11 |
| Michigan..... | 5 | 4 | 552 | 328 | 49.7 | 49.6 | .437 | .469 | 21.72 | 23.26 |
| Minnesota..... | 4 | 4 | 773 | 554 | 50.4 | 50.0 | .424 | .414 | 21.37 | 20.70 |
| Missouri..... | 11 | 11 | 6,431 | 5,956 | 49.3 | 49.7 | .456 | .462 | 22.48 | 22.96 |
| New Hampshire..... | 11 | 10 | 3,662 | 3,072 | 49.4 | 49.2 | .481 | .498 | 23.76 | 24.50 |
| New Jersey..... | 4 | 4 | 674 | 733 | 46.2 | 47.1 | .573 | .579 | 26.47 | 27.27 |
| New York..... | 25 | 21 | 9,807 | 8,944 | 48.0 | 48.1 | .593 | .575 | 28.46 | 27.66 |
| Ohio..... | 7 | 7 | 3,378 | 3,451 | 49.8 | 49.8 | .517 | .489 | 25.75 | 24.35 |
| Pennsylvania..... | 15 | 12 | 3,849 | 2,994 | 50.2 | 49.9 | .458 | .465 | 22.99 | 23.20 |
| Wisconsin..... | 12 | 11 | 3,039 | 2,550 | 48.9 | 49.1 | .504 | .514 | 24.65 | 25.24 |
| Total..... | 154 | 157 | 52,697 | 48,658 | 49.0 | 49.1 | .528 | .530 | 25.87 | 26.02 |

Wage Rates of Farm Labor

THE QUARTERLY statement of farm wage rates published by the United States Bureau of Agricultural Economics¹ shows that the index of the general level of farm wages on October 1 of this year was the same as a year ago, but five points higher than in July, 1928, the date of the previous quarterly survey. The advance from July to October is considerably more than the usual seasonal rise and is the largest since 1923. The average wages of day labor for the country as a whole were the same as last year.

¹ Crops and Markets, Washington, October, 1928.

There was a very small increase in average monthly wages with board, but a slight decrease in the rate without board.

Table 1 shows, for the United States as a whole, average farm wage rates and index numbers thereof, with board and without board, from 1910 to October, 1928. Details for the months of January, April, July, and October are given for the years 1923 to October, 1928. Table 2 gives the average daily and monthly wage rates, with board and without board, by States, for October, 1927, and October, 1928.

TABLE 1.—AVERAGE FARM WAGE RATES AND INDEX NUMBERS, 1910 TO OCTOBER, 1928

| Year or month | Average yearly farm wage ¹ | | | | Index numbers of farm wages (1910-1914=100) |
|--------------------|---------------------------------------|---------------|------------|---------------|---|
| | Per month | | Per day | | |
| | With board | Without board | With board | Without board | |
| 1910..... | \$19.58 | \$28.04 | \$1.07 | \$1.40 | 97 |
| 1911..... | 19.85 | 28.33 | 1.07 | 1.40 | 97 |
| 1912..... | 20.46 | 29.14 | 1.12 | 1.44 | 101 |
| 1913..... | 21.27 | 30.21 | 1.15 | 1.48 | 104 |
| 1914..... | 20.90 | 29.72 | 1.11 | 1.44 | 101 |
| 1915..... | 21.08 | 29.97 | 1.12 | 1.45 | 102 |
| 1916..... | 23.04 | 32.58 | 1.24 | 1.60 | 112 |
| 1917..... | 28.64 | 40.19 | 1.56 | 2.00 | 140 |
| 1918..... | 35.12 | 49.13 | 2.05 | 2.61 | 176 |
| 1919..... | 40.14 | 56.77 | 2.44 | 3.10 | 206 |
| 1920..... | 47.24 | 65.05 | 2.84 | 3.56 | 239 |
| 1921..... | 30.25 | 43.58 | 1.66 | 2.17 | 150 |
| 1922..... | 29.31 | 42.09 | 1.64 | 2.14 | 146 |
| 1923..... | 33.09 | 46.74 | 1.91 | 2.45 | 166 |
| 1924..... | 33.34 | 47.22 | 1.88 | 2.44 | 166 |
| 1925..... | 33.88 | 47.80 | 1.89 | 2.46 | 168 |
| 1926..... | 34.86 | 48.86 | 1.91 | 2.49 | 171 |
| 1927..... | 34.58 | 48.63 | 1.90 | 2.46 | 170 |
| 1923: January..... | 27.87 | 40.50 | 1.46 | 1.97 | 137 |
| April..... | 30.90 | 44.41 | 1.55 | 2.09 | 148 |
| July..... | 34.64 | 48.61 | 1.84 | 2.44 | 169 |
| October..... | 34.56 | 48.42 | 2.02 | 2.58 | 174 |
| 1924: January..... | 31.55 | 45.53 | 1.79 | 2.38 | 159 |
| April..... | 33.57 | 47.38 | 1.77 | 2.34 | 163 |
| July..... | 34.34 | 48.02 | 1.87 | 2.43 | 168 |
| October..... | 34.38 | 48.46 | 1.93 | 2.51 | 171 |
| 1925: January..... | 31.07 | 45.04 | 1.74 | 2.31 | 156 |
| April..... | 33.86 | 47.40 | 1.77 | 2.33 | 163 |
| July..... | 34.94 | 48.55 | 1.89 | 2.44 | 170 |
| October..... | 34.91 | 48.99 | 1.95 | 2.53 | 173 |
| 1926: January..... | 31.82 | 46.26 | 1.76 | 2.33 | 159 |
| April..... | 34.38 | 48.40 | 1.78 | 2.35 | 166 |
| July..... | 36.10 | 49.89 | 1.91 | 2.48 | 174 |
| October..... | 36.00 | 50.10 | 1.97 | 2.55 | 176 |
| 1927: January..... | 32.94 | 47.07 | 1.79 | 2.36 | 162 |
| April..... | 34.53 | 48.47 | 1.78 | 2.37 | 166 |
| July..... | 35.59 | 49.52 | 1.89 | 2.44 | 172 |
| October..... | 35.68 | 49.77 | 1.96 | 2.51 | 175 |
| 1928: January..... | 32.50 | 46.75 | 1.76 | 2.34 | 161 |
| April..... | 34.46 | 48.44 | 1.78 | 2.34 | 166 |
| July..... | 35.39 | 49.32 | 1.84 | 2.39 | 170 |
| October..... | 35.75 | 49.60 | 1.96 | 2.51 | 175 |

¹ Yearly averages are from reports by crop reporters, giving average wages for the year in their localities, except for 1924-1927, when the wage rates per month are a straight average of quarterly rates, April, July, October, of the current year, and January of the following year; and the wage rates per day are a weighted average of quarterly rates.

TABLE 2.—AVERAGE WAGES PAID TO HIRED FARM LABOR, BY STATES, OCTOBER, 1927 AND 1928

| State and division | Per month, with board | | Per month, without board | | Per day, with board | | Per day, without board | |
|---------------------|-----------------------|---------|--------------------------|---------|---------------------|--------|------------------------|--------|
| | 1927 | 1928 | 1927 | 1928 | 1927 | 1928 | 1927 | 1928 |
| Maine..... | \$45.00 | \$47.00 | \$66.00 | \$65.00 | \$2.75 | \$2.60 | \$3.30 | \$3.30 |
| New Hampshire..... | 49.00 | 49.00 | 71.00 | 74.00 | 2.70 | 2.55 | 3.45 | 3.65 |
| Vermont..... | 47.00 | 48.00 | 69.00 | 72.00 | 2.55 | 2.60 | 3.35 | 3.40 |
| Massachusetts..... | 52.00 | 49.00 | 83.00 | 80.00 | 2.90 | 2.90 | 3.75 | 3.75 |
| Rhode Island..... | 52.00 | 54.00 | 82.00 | 80.00 | 2.70 | 3.00 | 3.70 | 3.80 |
| Connecticut..... | 54.00 | 53.00 | 82.00 | 81.00 | 2.90 | 2.80 | 3.85 | 3.75 |
| New York..... | 49.75 | 49.75 | 69.50 | 70.75 | 3.05 | 3.00 | 3.80 | 3.80 |
| New Jersey..... | 47.00 | 47.00 | 72.00 | 70.00 | 2.90 | 2.85 | 3.80 | 3.55 |
| Pennsylvania..... | 41.00 | 39.75 | 61.50 | 59.75 | 2.60 | 2.55 | 3.40 | 3.30 |
| North Atlantic..... | 47.01 | 46.58 | 69.03 | 68.71 | 2.83 | 2.78 | 3.62 | 3.58 |
| Ohio..... | 39.25 | 38.75 | 54.50 | 53.75 | 2.50 | 2.45 | 3.25 | 3.10 |
| Indiana..... | 37.00 | 37.00 | 50.00 | 49.00 | 2.25 | 2.20 | 2.90 | 2.75 |
| Illinois..... | 42.50 | 43.25 | 55.00 | 55.00 | 2.25 | 2.30 | 2.95 | 2.95 |
| Michigan..... | 42.50 | 43.00 | 59.25 | 60.00 | 2.70 | 2.75 | 3.35 | 3.40 |
| Wisconsin..... | 49.00 | 48.75 | 67.25 | 65.25 | 2.55 | 2.50 | 3.10 | 3.10 |
| Minnesota..... | 47.25 | 47.00 | 63.75 | 63.75 | 2.75 | 2.80 | 3.50 | 3.55 |
| Iowa..... | 46.75 | 47.75 | 55.00 | 58.50 | 2.55 | 2.55 | 3.15 | 3.20 |
| Missouri..... | 33.00 | 33.00 | 45.00 | 44.00 | 1.65 | 1.70 | 2.20 | 2.20 |
| North Dakota..... | 53.25 | 54.25 | 72.00 | 75.75 | 4.20 | 4.15 | 4.90 | 5.05 |
| South Dakota..... | 48.25 | 48.25 | 66.50 | 66.00 | 2.95 | 3.00 | 3.70 | 3.80 |
| Nebraska..... | 43.00 | 43.00 | 55.75 | 58.00 | 2.55 | 2.45 | 3.30 | 3.30 |
| Kansas..... | 37.75 | 39.25 | 52.25 | 54.25 | 2.40 | 2.50 | 3.10 | 3.20 |
| North Central..... | 42.47 | 42.73 | 56.67 | 56.96 | 2.47 | 2.48 | 3.14 | 3.14 |
| Delaware..... | 33.00 | 32.00 | 50.00 | 46.00 | 2.50 | 2.35 | 3.15 | 3.05 |
| Maryland..... | 36.75 | 36.00 | 52.25 | 51.25 | 2.20 | 2.30 | 2.90 | 2.90 |
| Virginia..... | 31.00 | 30.00 | 43.00 | 42.00 | 1.65 | 1.65 | 2.15 | 2.15 |
| West Virginia..... | 34.00 | 33.25 | 48.75 | 48.00 | 1.75 | 1.75 | 2.40 | 2.45 |
| North Carolina..... | 27.50 | 27.75 | 38.00 | 39.25 | 1.40 | 1.50 | 1.75 | 1.90 |
| South Carolina..... | 20.50 | 21.00 | 29.25 | 28.00 | 1.00 | 1.00 | 1.35 | 1.25 |
| Georgia..... | 20.25 | 19.50 | 28.75 | 27.25 | 1.05 | 1.05 | 1.40 | 1.35 |
| Florida..... | 24.25 | 24.00 | 36.75 | 37.00 | 1.20 | 1.25 | 1.70 | 1.70 |
| South Atlantic..... | 25.77 | 25.43 | 36.44 | 35.78 | 1.35 | 1.38 | 1.78 | 1.78 |
| Kentucky..... | 27.50 | 27.25 | 38.25 | 38.00 | 1.35 | 1.40 | 1.75 | 1.80 |
| Tennessee..... | 25.75 | 24.50 | 33.50 | 33.25 | 1.15 | 1.20 | 1.55 | 1.50 |
| Alabama..... | 22.00 | 21.00 | 27.00 | 30.00 | 1.20 | 1.15 | 1.45 | 1.50 |
| Mississippi..... | 23.50 | 21.75 | 32.00 | 31.25 | 1.20 | 1.15 | 1.60 | 1.55 |
| Arkansas..... | 25.50 | 26.00 | 36.00 | 35.75 | 1.30 | 1.20 | 1.70 | 1.60 |
| Louisiana..... | 23.50 | 25.75 | 33.00 | 35.25 | 1.25 | 1.25 | 1.60 | 1.55 |
| Oklahoma..... | 30.25 | 31.25 | 47.25 | 43.25 | 1.75 | 1.80 | 2.20 | 2.25 |
| Texas..... | 26.50 | 31.25 | 43.25 | 42.50 | 1.55 | 1.60 | 2.00 | 2.00 |
| South Central..... | 25.57 | 26.57 | 36.85 | 36.74 | 1.36 | 1.37 | 1.75 | 1.74 |
| Montana..... | 60.25 | 60.50 | 77.50 | 83.25 | 3.65 | 3.70 | 4.40 | 4.35 |
| Idaho..... | 58.25 | 55.50 | 79.50 | 77.75 | 3.05 | 3.00 | 3.75 | 3.75 |
| Wyoming..... | 51.75 | 53.00 | 73.25 | 77.00 | 2.65 | 2.65 | 3.55 | 3.55 |
| Colorado..... | 43.00 | 40.50 | 65.00 | 60.50 | 2.40 | 2.35 | 3.20 | 3.15 |
| New Mexico..... | 35.25 | 36.25 | 49.75 | 49.25 | 1.75 | 1.85 | 2.15 | 2.30 |
| Arizona..... | 50.50 | 52.00 | 69.00 | 72.00 | 2.05 | 2.20 | 2.75 | 2.70 |
| Utah..... | 59.75 | 53.50 | 80.75 | 74.00 | 2.70 | 2.40 | 3.30 | 3.15 |
| Nevada..... | 63.25 | 62.00 | 89.00 | 80.00 | 2.85 | 2.65 | 3.50 | 3.50 |
| Washington..... | 53.75 | 52.75 | 77.75 | 78.00 | 3.05 | 2.85 | 3.70 | 3.70 |
| Oregon..... | 53.25 | 49.00 | 72.00 | 69.75 | 2.70 | 2.75 | 3.45 | 3.25 |
| California..... | 65.00 | 62.00 | 90.00 | 90.00 | 2.65 | 2.70 | 3.60 | 3.65 |
| Far Western..... | 56.39 | 54.21 | 78.33 | 77.68 | 2.67 | 2.66 | 3.45 | 3.44 |
| United States..... | 35.68 | 35.75 | 49.77 | 49.60 | 1.96 | 1.96 | 2.51 | 2.51 |

Wage Rates of Grape Pickers in California

WAGE rates for picking grapes in California are given in a report of a survey of methods of distributing and marketing California grapes, made by the Policyholders Service Bureau of the Metropolitan Life Insurance Co. at the request of the California Vineyardists' Association.¹

¹Metropolitan Life Insurance Co. Policyholders Service Bureau. Marketing California grapes. New York, 1928.

The average rates of pay for picking juice grapes under the piece-rate and the time-rate methods of wage payment and the output under the two methods of payment are shown by districts in the table which follows. Piecework rates are by the lug, a variety of container.

AVERAGE EARNINGS AND OUTPUT UNDER TIME-RATE AND PIECE-RATE METHODS OF PAYMENT FOR PICKING JUICE GRAPES

| District | Average wage rate | | Lugs picked per man-hour | |
|----------------------|-------------------|--------------|--------------------------|-----------|
| | Per lug | Per hour | Piece rate | Time rate |
| | <i>Cents</i> | <i>Cents</i> | | |
| Napa-Santa Rosa..... | 5.0 | 38.5 | 10.1 | 8.8 |
| Lodi..... | 5.9 | 42.4 | 7.9 | 7.1 |
| Modesto..... | 4.1 | 41.8 | 13.1 | 10.1 |
| Fresno..... | 3.0 | 39.8 | 15.2 | 8.8 |
| Hanford-Dinuba..... | 3.0 | 36.7 | 15.3 | 12.5 |
| Total..... | 3.9 | 40.6 | 12.4 | 7.9 |

Although the average piece rate in all districts for picking juice grapes was 3.9 cents per lug, the rate ranged in the different districts from 3 to as high as 7 cents; the time rate ranged from 30 to 50 cents per hour. The average rate of pay per hour for picking table grapes in four districts for which figures are given was as follows: Lodi, 42.7 cents; Modesto, 39.8 cents; Fresno, 39.8 cents; and Dinuba, 39.9 cents.

The average labor cost per acre for growing table grapes, as reported by 246 growers, was \$34.83, and for growing juice grapes, reported by 418 growers, \$33.31.

Sunday Rest in Colombia¹

AN EXECUTIVE decree was promulgated in Colombia on June 26, 1928, unifying practice in all public enterprises as regards Sunday rest.

The decree provides that all laborers engaged in work for the national, departmental, or municipal authorities shall be entitled to a day of rest with pay on Sundays and national and religious holidays. Laborers who are required by the exigencies of the service to work on such holidays shall be entitled to a compensatory rest day or double wages, as they prefer.

Salaried employees paid by the month who are employed in industrial or commercial undertakings managed by the national, departmental, or municipal authorities, when obliged by the nature of their employment to work on Sundays or national or religious holidays, shall be entitled to a compensatory rest day or to remuneration equal to one-thirtieth of their monthly salary for each day worked, whichever they prefer.

Employees and workers may not benefit by the provisions of this decree unless they have been employed on all the working-days of the said week.

¹ Colombia, Diario Nacional, Bogota, June 28, 1928, p. 1.

TREND OF EMPLOYMENT

Summary for October, 1928

EMPLOYMENT increased 1 per cent in October, 1928, as compared with September, and pay-roll totals increased 4 per cent, according to returns made to the Bureau of Labor Statistics.

The lines of employment surveyed, the number of establishments reporting in each line, and the number of employees covered together with total pay rolls for *one week*, for both September and October, are shown in the following statement:

PER CENT OF CHANGE IN EACH LINE OF EMPLOYMENT—SEPTEMBER TO OCTOBER, 1928

| Line of employment | Estab- lish- ments | Employment | | Per cent of change | Pay roll | | Per cent of change |
|--------------------------|--------------------------|------------|-----------|-----------------------------|--------------|--------------|-----------------------------|
| | | September | October | | September | October | |
| 1. Manufacturing..... | 11,940 | 3,261,263 | 3,287,165 | +0.9 | \$87,517,987 | \$90,868,879 | +3.7 |
| 2. Coal mining: | | | | | | | |
| Anthracite..... | 41 | 21,633 | 22,878 | +5.8 | 645,950 | 828,956 | +21.3 |
| Bituminous..... | 278 | 65,274 | 69,158 | +6.0 | 1,621,437 | 1,840,489 | +13.5 |
| 3. Public utilities..... | 2,445 | 358,352 | 356,894 | -0.4 | 10,524,443 | 10,795,725 | +2.6 |
| 4. Trade: | | | | | | | |
| Wholesale..... | 966 | 30,609 | 30,651 | +0.1 | 875,351 | 887,129 | +1.3 |
| Retail..... | 1,550 | 115,709 | 124,032 | +7.1 | 2,802,969 | 2,959,783 | +5.6 |
| Total..... | 17,220 | 3,852,900 | 3,890,778 | +1.0 | 103,988,137 | 108,180,961 | +4.0 |

1. Employment in Selected Manufacturing Industries in October, 1928

EMPLOYMENT in *manufacturing* industries increased 0.9 per cent in October, 1928, as compared with September, and pay-roll totals increased 3.7 per cent, as shown by returns from 11,940 establishments in 54 of the principal manufacturing industries of the United States. While these industries are for the most part long-established ones, the very prominent newer industries, although not specifically mentioned, are nevertheless represented in a considerable degree. For example, many silk mills, cotton mills, and hosiery mills have added rayon goods to their regular products; radio and electric-refrigerator parts and supplies are turned out by establishments making electrical machinery, apparatus, and supplies; phonograph cabinets are made in furniture factories; and automobile bodies and parts are included in the automobile industry.

The 11,940 establishments reporting had, in October, 3,287,165 employees and combined pay rolls amounting to \$90,868,879. These employees represent more than *one-half* of the total employees in the 54 industries included and nearly 40 per cent of the total employees in *all* manufacturing industries of the United States. The last named percentage shows very clearly the relative importance of the 54 industries covered.

The Bureau of Labor Statistics' weighted index of employment in manufacturing industries for October, 1928, is 88.1, as compared

with 87.3 for September, 1928, 86 for August, 1928, and 87.6 for October, 1927; the weighted index for pay-roll totals for October, 1928, is 94.8, as compared with 91.4 for September, 1928, 90.2 for August, 1928, and 91.2 for October, 1927. The monthly average for 1923 = 100.

The level of employment in manufacturing industries for October, 1928, is distinctive in two particulars—it is higher than the level of employment in any month since June, 1927, and also it is higher than the level of employment in the same month (October) of the year immediately preceding, this being the first time in exactly two years, that is, since October, 1926, that the index of employment for the current month has been higher than the index for the same month of the year next preceding.

Comparison of Employment and Pay-Roll Totals in September and October, 1928

THIRTY-THREE of the fifty-four separate industries and 9 of the 12 groups of industries had more employees in October, 1928, than in September, and 44 of the separate industries and 11 of the groups of industries had higher pay-roll totals.

The notable increase in employment in any group of industries was 3.1 per cent in the textile group, very large increases having appeared in 8 of the 10 separate industries, millinery and men's clothing alone having reported decreased employment. The *iron and steel industry* gained 0.3 per cent in employment in October. The *automobile industry* showed a *decrease* in employment of 1.4 per cent, this being the first decrease reported in this industry since November, 1927, with two very small exceptions, one decrease having been one-tenth of 1 per cent and one even smaller; the total *increase* in employment in the automobile industry from November, 1927, to September, 1928, was 53.3 per cent.

Five of the nine geographic divisions reported increased employment in October, the New England and Middle Atlantic divisions showing the notable gains; the greatest decrease among the remaining four divisions was in the Pacific States.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN SEPTEMBER AND OCTOBER, 1928

| Industry | Estab-lish-ments | Number on pay roll | | Per cent of change | Amount of pay roll | | Per cent of change |
|--|------------------|--------------------|----------------|--------------------|--------------------|--------------------|--------------------|
| | | Septem-ber, 1928 | October, 1928 | | Septem-ber, 1928 | October, 1928 | |
| Food and kindred products | 1,766 | 227,701 | 233,214 | (1) | \$5,854,940 | \$5,971,512 | (1) |
| Slaughtering and meat pack- ing..... | 198 | 84,070 | 85,202 | +1.3 | 2,206,633 | 2,223,166 | +0.7 |
| Confectionery..... | 304 | 35,984 | 40,644 | +13.0 | 652,923 | 749,444 | +14.8 |
| Ice cream..... | 252 | 11,095 | 9,917 | -10.6 | 373,128 | 332,548 | -10.9 |
| Flour..... | 341 | 16,240 | 16,500 | +1.6 | 439,599 | 462,125 | +5.1 |
| Baking..... | 655 | 69,372 | 69,674 | +0.4 | 1,855,437 | 1,858,942 | +0.2 |
| Sugar refining, cane..... | 16 | 10,940 | 11,277 | +3.1 | 327,220 | 345,287 | +5.5 |
| Textiles and their products | 2,066 | 583,428 | 601,881 | (1) | 11,299,007 | 12,032,164 | (1) |
| Cotton goods..... | 459 | 200,968 | 209,405 | +4.2 | 3,069,485 | 3,305,767 | +7.7 |
| Hosiery and knit goods..... | 313 | 87,372 | 88,998 | +1.9 | 1,621,175 | 1,765,139 | +8.9 |
| Silk goods..... | 264 | 62,191 | 64,154 | +3.2 | 1,319,774 | 1,388,931 | +5.2 |
| Woolen and worsted goods..... | 189 | 60,086 | 63,495 | +5.7 | 1,310,878 | 1,456,227 | +11.1 |
| Carpets and rugs..... | 31 | 22,743 | 24,260 | +6.7 | 585,164 | 627,021 | +7.2 |
| Dyeing and finishing textiles..... | 101 | 31,015 | 31,923 | +2.9 | 752,175 | 803,913 | +6.9 |
| Clothing, men's..... | 315 | 64,300 | 63,326 | -1.5 | 1,482,267 | 1,448,544 | -2.3 |
| Shirts and collars..... | 121 | 21,912 | 22,826 | +4.2 | 341,830 | 378,086 | +10.6 |
| Clothing, women's..... | 199 | 21,647 | 22,630 | +4.5 | 543,386 | 605,075 | +11.4 |
| Millinery and lace goods..... | 74 | 11,194 | 10,864 | -2.9 | 272,873 | 253,461 | -7.1 |

See footnotes at end of table.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN SEPTEMBER AND OCTOBER, 1928—Continued

| Industry | Estab- lish- ments | Number on pay roll | | Per cent of change | Amount of pay roll | | Per cent of change |
|--|--------------------------|----------------------|------------------|--------------------------|----------------------|---------------------|--------------------------|
| | | Septem- ber, 1928 | October, 1928 | | Septem- ber, 1928 | October, 1928 | |
| Iron and steel and their prod- ucts | 1,826 | 673,832 | 678,457 | (1) | \$20,023,178 | \$21,097,996 | (1) |
| Iron and steel..... | 202 | 268,280 | 269,075 | +0.3 | 8,214,476 | 8,731,754 | +6.3 |
| Cast-iron pipe..... | 36 | 12,052 | 11,838 | -1.8 | 266,268 | 276,459 | +3.8 |
| Structural ironwork..... | 160 | 25,468 | 25,592 | +0.5 | 752,576 | 788,856 | +4.8 |
| Foundry and machine shop products..... | 988 | 249,503 | 251,499 | +0.8 | 7,391,936 | 7,723,055 | +4.5 |
| Hardware..... | 69 | 31,380 | 31,341 | -0.1 | 774,149 | 812,944 | +5.0 |
| Machine tools..... | 146 | 33,317 | 34,389 | +3.2 | 1,082,588 | 1,153,554 | +6.6 |
| Steam fittings and steam and hot-water heating apparatus..... | 112 | 35,174 | 35,155 | -(2) | 1,020,242 | 1,026,657 | +0.6 |
| Stoves..... | 113 | 18,658 | 19,568 | +4.9 | 520,043 | 584,717 | +12.2 |
| Lumber and its products | 1,377 | 243,906 | 244,307 | (1) | 5,418,904 | 5,552,048 | (1) |
| Lumber, sawmills..... | 646 | 145,216 | 144,189 | -0.7 | 3,011,780 | 3,030,803 | +0.6 |
| Lumber, millwork..... | 313 | 35,534 | 34,482 | -3.0 | 849,925 | 852,387 | +0.3 |
| Furniture..... | 418 | 63,156 | 65,636 | +3.9 | 1,557,190 | 1,668,858 | +7.2 |
| Leather and its products | 348 | 117,233 | 115,409 | (1) | 2,755,156 | 2,659,155 | (1) |
| Leather..... | 135 | 27,682 | 27,292 | -1.4 | 678,379 | 680,830 | +0.4 |
| Boots and shoes..... | 213 | 89,541 | 88,117 | -1.6 | 2,076,777 | 1,978,325 | -4.7 |
| Paper and printing | 1,107 | 196,193 | 198,451 | (1) | 6,432,897 | 6,569,993 | (1) |
| Paper and pulp..... | 216 | 58,137 | 58,112 | -(2) | 1,534,385 | 1,581,411 | +3.1 |
| Paper boxes..... | 188 | 19,828 | 20,855 | +5.2 | 449,197 | 480,538 | +7.0 |
| Printing, book and job..... | 313 | 52,809 | 53,100 | +0.6 | 1,879,136 | 1,874,559 | -0.2 |
| Printing, newspapers..... | 390 | 65,419 | 66,384 | +1.5 | 2,570,179 | 2,633,485 | +2.5 |
| Chemicals and allied products | 366 | 90,958 | 90,776 | (1) | 2,660,617 | 2,689,179 | (1) |
| Chemicals..... | 134 | 33,015 | 33,598 | +1.8 | 889,233 | 945,681 | +6.3 |
| Fertilizers..... | 176 | 11,317 | 11,191 | -1.1 | 225,508 | 215,893 | -4.3 |
| Petroleum refining..... | 56 | 46,626 | 45,987 | -1.4 | 1,545,876 | 1,527,606 | -1.2 |
| Stone, clay, and glass prod- ucts | 936 | 132,121 | 129,733 | (1) | 3,378,193 | 3,429,650 | (1) |
| Cement..... | 109 | 26,812 | 26,396 | -1.6 | 786,331 | 786,567 | +(2) |
| Brick, tile, and terra cotta..... | 570 | 40,857 | 39,560 | -3.2 | 1,014,835 | 1,002,837 | -1.2 |
| Pottery..... | 128 | 21,400 | 21,908 | +2.1 | 512,209 | 535,313 | +4.5 |
| Glass..... | 129 | 42,992 | 41,869 | -2.6 | 1,064,818 | 1,104,933 | +3.8 |
| Metal products, other than iron and steel | 223 | 50,865 | 51,659 | (1) | 1,350,920 | 1,437,174 | (1) |
| Stamped and enameled ware..... | 71 | 18,773 | 18,871 | +0.5 | 448,464 | 472,253 | +5.3 |
| Brass, bronze, and copper products..... | 152 | 32,092 | 32,788 | +2.2 | 902,456 | 964,921 | +6.9 |
| Tobacco products | 261 | 66,839 | 68,431 | (1) | 1,125,723 | 1,154,508 | (1) |
| Chewing and smoking tobacco and snuff..... | 29 | 8,400 | 8,418 | +0.2 | 134,787 | 137,633 | +2.1 |
| Cigars and cigarettes..... | 232 | 58,439 | 60,013 | +2.7 | 990,936 | 1,016,875 | +2.6 |
| Vehicles for land transporta- tion | 1,300 | 611,138 | 603,544 | (1) | 19,328,832 | 20,177,774 | (1) |
| Automobiles..... | 211 | 450,267 | 444,019 | -1.4 | 14,674,429 | 15,265,019 | +4.0 |
| Carriages and wagons..... | 57 | 1,871 | 1,732 | -7.4 | 42,247 | 39,757 | -5.9 |
| Car building and repairing, electric-railroad..... | 388 | 23,368 | 23,343 | -0.1 | 716,734 | 742,118 | +3.5 |
| Car building and repairing, steam-railroad..... | 544 | 135,632 | 134,470 | -0.9 | 3,895,422 | 4,130,880 | +6.0 |
| Miscellaneous industries | 464 | 267,059 | 271,283 | (1) | 7,889,626 | 8,997,726 | (1) |
| Agricultural implements..... | 82 | 25,282 | 26,624 | +5.3 | 733,434 | 797,360 | +8.7 |
| Electrical machinery, appara- tus, and supplies..... | 170 | 126,983 | 129,384 | +1.9 | 3,609,064 | 3,859,113 | +5.2 |
| Pianos and organs..... | 70 | 8,835 | 8,990 | +1.8 | 263,361 | 275,156 | +4.5 |
| Rubber boots and shoes..... | 12 | 18,153 | 18,702 | +3.0 | 441,922 | 447,869 | +1.3 |
| Automobile tires..... | 49 | 60,611 | 59,875 | -1.2 | 1,975,251 | 1,903,191 | -3.6 |
| Shipbuilding..... | 81 | 27,195 | 27,708 | +1.9 | 806,588 | 815,037 | +1.0 |
| All Industries | 11,940 | 3,261,263 | 3,287,165 | (1) | 87,517,967 | 90,868,879 | (1) |

See footnotes at end of table.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN SEPTEMBER AND OCTOBER, 1928—Continued

RECAPITULATION BY GEOGRAPHIC DIVISIONS

| Industry | Estab- lish- ments | Number on pay roll | | Per cent of change | Amount of pay roll | | Per cent of change |
|---------------------------------|--------------------------|----------------------|------------------|--------------------------|----------------------|------------------|--------------------------|
| | | Septem- ber, 1928 | October, 1928 | | Septem- ber, 1928 | October, 1928 | |
| GEOGRAPHIC DIVISION | | | | | | | |
| New England ³ | 1,417 | 382,009 | 393,901 | +3.1 | \$9,535,646 | \$9,799,191 | +2.8 |
| Middle Atlantic ⁴ | 2,764 | 844,606 | 858,741 | +1.7 | 23,911,366 | 24,891,509 | +4.1 |
| East North Central ⁵ | 3,141 | 1,165,262 | 1,164,802 | — (?) | 34,845,743 | 36,470,092 | +4.7 |
| West North Central ⁶ | 1,077 | 165,447 | 166,418 | +0.6 | 4,200,126 | 4,315,224 | +2.7 |
| South Atlantic ⁷ | 1,499 | 329,131 | 330,739 | +0.5 | 6,291,870 | 6,524,407 | +3.7 |
| East South Central ⁸ | 608 | 120,687 | 119,911 | —0.6 | 2,266,155 | 2,304,278 | +1.7 |
| West South Central ⁹ | 485 | 86,864 | 86,733 | —0.2 | 1,898,202 | 1,939,986 | +2.2 |
| Mountain ¹⁰ | 223 | 32,501 | 32,609 | +0.3 | 889,082 | 910,700 | +2.4 |
| Pacific ¹¹ | 726 | 134,756 | 133,311 | —1.1 | 3,679,797 | 3,713,492 | +0.9 |
| All divisions | 11,940 | 3,261,263 | 3,287,165 | (1) | 87,517,987 | 90,868,879 | (1) |

¹ The per cent of change has not been computed for the reason that the figures in the preceding columns are unweighted and refer only to the establishments reporting; for the weighted per cent of change, wherein proper allowance is made for the relative importance of the several industries, so that the figures may represent all establishments of the country in the industries here represented, see Table 2.

² Less than one-tenth of 1 per cent.

³ Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont.

⁴ New Jersey, New York, Pennsylvania.

⁵ Illinois, Indiana, Michigan, Ohio, Wisconsin.

⁶ Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota.

⁷ Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia.

⁸ Alabama, Kentucky, Mississippi, Tennessee.

⁹ Arkansas, Louisiana, Oklahoma, Texas.

¹⁰ Arizona, Colorado, Idaho, Montana, New Mexico, Nevada, Utah, Wyoming.

¹¹ California, Oregon, Washington.

TABLE 2.—PER CENT OF CHANGE, SEPTEMBER TO OCTOBER, 1928—12 GROUPS OF INDUSTRIES AND TOTAL OF ALL INDUSTRIES

[Computed from the index numbers of each group, which are obtained by weighting the index numbers of the several industries of the group, by the number of employees, or wages paid, in the industries.]

| Group | Per cent of change, September to October, 1928 | | Group | Per cent of change, September to October, 1928 | |
|--|--|--------------------------|--|--|--------------------------|
| | Number on pay roll | Amount of pay roll | | Number on pay roll | Amount of pay roll |
| Food and kindred products | +2.3 | +2.0 | Metal products, other than iron and steel | +1.7 | +0.5 |
| Textiles and their products | +3.1 | +6.7 | Tobacco products | +2.4 | +2.4 |
| Iron and steel and their pro- ducts | +0.8 | +5.4 | Vehicles for land transpor- tation | —1.2 | +4.7 |
| Lumber and its products | +0.1 | +2.0 | Miscellaneous industries | +1.6 | +1.7 |
| Leather and its products | —1.5 | —3.2 | | | |
| Paper and printing | +1.4 | +2.3 | | | |
| Chemicals and allied products | +0.2 | +2.0 | | | |
| Stone, clay, and glass pro- ducts | —1.9 | +1.9 | All industries | +0.9 | +3.7 |

Comparison of Employment and Pay-Roll Totals in October, 1928, and October, 1927

THE level of employment in October, 1928, was 0.6 per cent higher than in October, 1927, and pay-roll totals were 3.9 per cent higher.

There was a gain in employment in the vehicle group of industries of 13.1 per cent over this 12-month period; the nonferrous metal group gained 6.3 per cent; the iron and steel group gained 4.6 per cent; and the chemical group gained 0.9 per cent.

Among the separate industries, automobiles, automobile tires, agricultural implements, and machine tools showed enormous gains in October, 1928, as compared with October, 1927, while other notable, although smaller, increases were shown in foundry and machine-shop products, structural iron-work, fertilizers, pottery, and brass-bronze-copper products; the *iron and steel industry* gained 2.3 per cent, and electrical machinery gained 3.7 per cent.

The outstanding decreases shown by this comparison were in cotton goods, steam fittings, cement, brick, chewing and smoking tobacco, car building and repairing, pianos and organs, and shipbuilding.

The East North Central States showed a gain in employment of 14.6 per cent in October, 1928, as compared with October, 1927, and the Mountain and Pacific geographic divisions each showed small gains, but the remaining 6 divisions had fewer employees at the end of the 12-month period.

| Group | October, 1927 | | October, 1928 | | Change, 1928-1927 |
|----------------|---------------|-----------------|---------------|-----------------|-------------------|
| | Employment | Pay-roll | Employment | Pay-roll | |
| Total | 10,000,000 | \$1,000,000,000 | 10,060,000 | \$1,039,000,000 | 0.6% 3.9% |
| Manufacturing | 8,500,000 | \$850,000,000 | 8,560,000 | \$889,000,000 | 0.7% 4.6% |
| Construction | 1,000,000 | \$100,000,000 | 1,000,000 | \$100,000,000 | 0% 0% |
| Transportation | 500,000 | \$50,000,000 | 500,000 | \$50,000,000 | 0% 0% |
| Commerce | 500,000 | \$50,000,000 | 500,000 | \$50,000,000 | 0% 0% |
| Services | 500,000 | \$50,000,000 | 500,000 | \$50,000,000 | 0% 0% |
| Unemployed | 1,500,000 | \$150,000,000 | 1,500,000 | \$150,000,000 | 0% 0% |
| Government | 1,000,000 | \$100,000,000 | 1,000,000 | \$100,000,000 | 0% 0% |
| Education | 500,000 | \$50,000,000 | 500,000 | \$50,000,000 | 0% 0% |
| Health | 500,000 | \$50,000,000 | 500,000 | \$50,000,000 | 0% 0% |
| Religion | 500,000 | \$50,000,000 | 500,000 | \$50,000,000 | 0% 0% |
| Arts | 500,000 | \$50,000,000 | 500,000 | \$50,000,000 | 0% 0% |
| Leisure | 500,000 | \$50,000,000 | 500,000 | \$50,000,000 | 0% 0% |
| Other | 500,000 | \$50,000,000 | 500,000 | \$50,000,000 | 0% 0% |

TABLE 3.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS, OCTOBER, 1928
WITH OCTOBER, 1927[The per cents of change for each of the 12 groups of industries and for the total of all industries are weighted
in the same manner as are the per cents of change in Table 2]

| Industry | Per cent of change October, 1928, compared with October, 1927 | | Industry | Per cent of change October, 1928, compared with October, 1927 | |
|---|--|--------------------------|---|--|--------------------------|
| | Num- ber on pay roll | Amount of pay roll | | Num- ber on pay roll | Amount of pay roll |
| Food and kindred products | -0.8 | +0.5 | Chemicals and allied prod- ucts | +0.9 | +2.0 |
| Slaughtering and meat pack- ing..... | (1) | +1.4 | Chemicals..... | +0.9 | +2.2 |
| Confectionery..... | -1.4 | +0.9 | Fertilizers..... | +5.8 | +6.0 |
| Ice cream..... | -0.1 | -0.1 | Petroleum refining..... | -1.4 | +0.6 |
| Flour..... | +0.2 | +2.9 | | | |
| Baking..... | -0.9 | -0.8 | Stone, clay, and glass prod- ucts | -2.2 | -1.0 |
| Sugar refining, cane..... | -6.0 | -0.1 | Cement..... | -8.7 | -8.1 |
| Textiles and their products | -5.1 | -5.2 | Brick, tile, and terra cotta..... | -6.2 | -6.1 |
| Cotton goods..... | -11.0 | -15.6 | Pottery..... | +5.5 | -0.9 |
| Hosiery and knit goods..... | -5.9 | -4.1 | Glass..... | +0.8 | +5.7 |
| Silk goods..... | +1.1 | +5.5 | | | |
| Woolen and worsted goods..... | -3.0 | -2.7 | Metal products, other than iron and steel | +6.3 | +18.8 |
| Carpets and rugs..... | +2.9 | +0.3 | Stamped and enameled ware..... | +2.0 | +3.4 |
| Dyeing and finishing tex- tiles..... | -2.8 | -2.1 | Brass, bronze, and copper products..... | +8.0 | +24.1 |
| Clothing, men's..... | -6.9 | -8.4 | | | |
| Shirts and collars..... | -3.2 | -5.5 | Tobacco products | -3.5 | -4.4 |
| Clothing, women's..... | +2.7 | +4.9 | Chewing and smoking to- bacco and snuff..... | -8.0 | -6.6 |
| Millinery and lace goods..... | -2.1 | -7.1 | Cigars and cigarettes..... | -2.8 | -4.1 |
| Iron and steel and their products | +4.6 | +12.8 | | | |
| Iron and steel..... | +2.3 | +12.6 | Vehicles for land transpor- tation | +13.1 | +17.0 |
| Cast-iron pipe..... | -4.8 | -5.7 | Automobiles..... | +38.6 | +44.5 |
| Structural ironwork..... | +5.2 | +10.7 | Carriage and wagons..... | +1.2 | +2.0 |
| Foundry and machine shop products..... | +6.3 | +13.9 | Car building and repairing, electric-railroad..... | -8.7 | -5.9 |
| Hardware..... | -0.3 | +4.7 | Car building and repairing, steam-railroad..... | -6.4 | -4.0 |
| Machine tools..... | +22.2 | +35.3 | | | |
| Steam fittings and steam and hot-water heating apparatus..... | -11.5 | -11.4 | Miscellaneous industries | -0.7 | -1.5 |
| Stoves..... | +1.3 | +4.6 | Agricultural implements..... | +22.8 | +29.3 |
| Lumber and its products | -3.1 | -3.3 | Electrical machinery, ap- paratus, and supplies..... | +3.7 | +6.2 |
| Lumber, sawmills..... | -3.3 | -4.2 | Pianos and organs..... | -15.6 | -16.0 |
| Lumber, millwork..... | -3.3 | -1.9 | Rubber boots and shoes..... | -4.7 | -9.3 |
| Furniture..... | -2.4 | -1.3 | Automobile tires..... | -16.7 | -21.5 |
| Leather and its products | -5.4 | -4.8 | Shipbuilding..... | -13.4 | -15.5 |
| Leather..... | -3.5 | -2.1 | | | |
| Boots and shoes..... | -6.0 | -5.8 | All industries | +0.6 | +3.9 |
| Paper and printing | -0.7 | +1.2 | | | |
| Paper and pulp..... | -3.0 | -0.3 | | | |
| Paper boxes..... | -2.3 | +0.4 | | | |
| Printing, book and job..... | -0.6 | +1.0 | | | |
| Printing, newspapers..... | +1.8 | +2.8 | | | |

RECAPITULATION BY GEOGRAPHIC DIVISIONS

| GEOGRAPHIC DIVISION ¹ | | | GEOGRAPHIC DIVISION | | |
|----------------------------------|-------|-------|----------------------------|------|------|
| New England..... | -4.7 | -2.0 | West-South Central..... | -1.9 | -0.3 |
| Middle Atlantic..... | -2.6 | +1.1 | Mountain..... | +1.4 | +4.8 |
| East North Central..... | +14.6 | +21.7 | Pacific..... | +0.1 | -0.5 |
| West North Central..... | -0.6 | +1.4 | | | |
| South Atlantic..... | -2.7 | -0.5 | All divisions | +0.6 | +3.9 |
| East-South Central..... | -3.1 | -3.7 | | | |

¹ No change.² See footnotes 3 to 11, p. 195.

Per Capita Earnings

PER CAPITA earnings of employees in the combined 54 manufacturing industries in October, 1928, were 2.8 per cent greater than in September, 1928, and 3.4 per cent greater than in October, 1927.

In October, 1928, 42 of the 54 separate industries showed increased per capita earnings as compared with September, 1928, while 38 industries showed increased per capita earnings as compared with October, 1927.

TABLE 4.—COMPARISON OF PER CAPITA EARNINGS, OCTOBER, 1928, WITH SEPTEMBER, 1928, AND OCTOBER, 1927

| Industry | Per cent of change October, 1928, compared with— | | Industry | Per cent of change October, 1928, compared with— | |
|--|--|----------------|---|--|----------------|
| | Sep-tember, 1928 | Octo-ber, 1927 | | Sep-tember, 1928 | Octo-ber, 1927 |
| Car building and repairing, steam-railroad..... | +7.0 | +2.9 | Sugar refining, cane..... | +2.4 | +6.3 |
| Stoves..... | +7.0 | +3.4 | Pottery..... | +2.3 | -5.9 |
| Hosiery and knit goods..... | +6.9 | +1.6 | Brick, tile, and terra cotta..... | +2.1 | -0.2 |
| Clothing, women's..... | +6.5 | +1.9 | Silk goods..... | +2.0 | +4.4 |
| Glass..... | +6.5 | +4.8 | Chewing and smoking tobacco and snuff..... | +1.9 | +1.8 |
| Shirts and collars..... | +6.2 | -2.1 | Leather..... | +1.8 | +1.2 |
| Iron and steel..... | +6.0 | +10.1 | Confectionery..... | +1.7 | +2.4 |
| Cast-iron pipe..... | +5.7 | -1.2 | Paper boxes..... | +1.7 | +2.8 |
| Automobiles..... | +5.5 | +4.7 | Carriages and wagons..... | +1.6 | +0.6 |
| Hardware..... | +5.1 | +4.6 | Cement..... | +1.6 | +1.0 |
| Woolen and worsted goods..... | +5.1 | +0.2 | Lumber, sawmills..... | +1.4 | -1.1 |
| Stamped and enameled ware..... | +4.8 | +1.4 | Printing, newspapers..... | +1.0 | +1.0 |
| Brass, bronze, and copper products..... | +4.7 | +15.2 | Steam fittings and steam and hot-water heating apparatus..... | +0.7 | +0.1 |
| Chemicals..... | +4.5 | +1.4 | Carpets and rugs..... | +0.5 | -2.6 |
| Structural ironwork..... | +4.3 | +5.1 | Petroleum refining..... | +0.2 | +1.8 |
| Dyeing and finishing textiles..... | +3.8 | +0.5 | Cigars and cigarettes..... | -0.1 | -1.4 |
| Car building and repairing, electric-railroad..... | +3.7 | +3.0 | Baking..... | -0.3 | -0.1 |
| Foundry and machine-shop products..... | +3.6 | +7.1 | Ice cream..... | -0.3 | (1) |
| Flour..... | +3.5 | +2.7 | Slaughtering and meat packing..... | -0.6 | +1.4 |
| Cotton goods..... | +3.4 | -5.0 | Clothing, men's..... | -0.8 | -2.1 |
| Electrical machinery, apparatus, and supplies..... | +3.3 | +2.3 | Printing, book and job..... | -0.8 | +1.6 |
| Lumber, millwork..... | +3.3 | +1.1 | Shipbuilding..... | -0.8 | -2.4 |
| Agricultural implements..... | +3.2 | +5.2 | Rubber boots and shoes..... | -1.6 | -5.0 |
| Machine tools..... | +3.2 | +10.4 | Automobile tires..... | -2.5 | +3.8 |
| Furniture..... | +3.1 | +1.4 | Boots and shoes..... | -3.2 | -0.1 |
| Paper and pulp..... | +3.1 | +2.5 | Fertilizers..... | -3.2 | +0.2 |
| Pianos and organs..... | +2.7 | -0.7 | Millinery and lace goods..... | -4.3 | -5.2 |
| | | | All industries..... | +2.8 | +3.4 |

¹No change.

Wage Changes

FORTY-EIGHT establishments in 17 industries reported wage-rate increases made during the month ending October 15, 1928. These increases averaged 5.6 per cent and affected 8,673 employees, or 61 per cent of all employees in the establishments concerned.

Twelve establishments in five industries reported wage-rate decreases made during the same period. These decreases averaged 5 per cent and affected 6,979 employees, or 84 per cent of all employees in the establishments concerned.

The increases and decreases reported in the cotton-goods industry were, in both cases, adjustments connected with the settlement of the strike in one State, which began in April, 1928. No especial significance can be attached to any of the other increases or decreases.

TABLE 5.—WAGE ADJUSTMENTS OCCURRING BETWEEN SEPTEMBER 15 AND OCTOBER 15, 1928

| Industry | Establishments | | Per cent of increase or decrease in wage rate | | Employees affected | | |
|--|------------------------|---|---|---------|--------------------|--|---------------------------------|
| | Total number reporting | Number reporting increase or decrease in wage rates | Range | Average | Total number | Per cent of employees | |
| | | | | | | In establishments reporting increase or decrease in wage rates | In all establishments reporting |
| | | | Increases | | | | |
| Confectionery..... | 304 | 2 | 3.0 | 3.0 | 36 | 45 | (1) |
| Baking..... | 655 | 2 | 8.0- 8.2 | 8.2 | 43 | 6 | (1) |
| Cotton goods..... | 459 | 8 | 5.0- 5.5 | 5.5 | 5,653 | 100 | 3 |
| Woolen and worsted goods..... | 189 | 1 | 20.0 | 20.0 | 50 | 25 | (1) |
| Dyeing and finishing textiles..... | 101 | 1 | 5.5 | 5.5 | 1,845 | 82 | 6 |
| Shirts and collars..... | 121 | 1 | 10.0 | 10.0 | 54 | 96 | (1) |
| Millinery and lace goods..... | 74 | 1 | 5.0 | 5.0 | 20 | 12 | (1) |
| Foundry and machine-shop products..... | 988 | 8 | 1.0-20.0 | 7.7 | 129 | 13 | (1) |
| Machine tools..... | 146 | 3 | 5.0-10.0 | 5.9 | 16 | 14 | (1) |
| Lumber, sawmills..... | 646 | 1 | 10.0 | 10.0 | 40 | 12 | (1) |
| Printing, book and job..... | 313 | 5 | 2.0- 9.0 | 2.7 | 425 | 32 | 1 |
| Printing, newspapers..... | 390 | 5 | 2.0-10.0 | 3.5 | 114 | 20 | (1) |
| Brick, tile, and terra cotta..... | 570 | 2 | 1.0-11.8 | 9.9 | 34 | 58 | (1) |
| Glass..... | 129 | 2 | 9.6-13.0 | 10.7 | 35 | 4 | (1) |
| Brass, bronze, and copper products..... | 152 | 2 | 6.0- 8.3 | 8.0 | 21 | 50 | (1) |
| Car building and repairing, electric-railroad..... | 388 | 2 | 6.9-13.5 | 13.1 | 123 | 95 | 1 |
| Electrical machinery, apparatus, and supplies..... | 170 | 2 | 5.0-10.0 | 5.6 | 35 | 7 | (1) |
| | | | Decreases | | | | |
| Confectionery..... | 304 | 1 | 2.0 | 2.0 | 40 | 89 | (1) |
| Cotton goods..... | 459 | 8 | 5.0 | 5.0 | 6,269 | 100 | |
| Foundry and machine-shop products..... | 988 | 1 | 5.0 | 5.0 | 500 | 32 | (1) |
| Lumber, millwork..... | 313 | 1 | 10.0 | 10.0 | 75 | 21 | (1) |
| Car building and repairing, electric-railroad..... | 388 | 1 | 1.0- 2.0 | 1.5 | 95 | 100 | (1) |

¹ Less than one-half of 1 per cent.

Indexes of Employment and Pay-roll Totals in Manufacturing Industries

INDEX numbers for October, September, and August, 1928, and for October, 1927, showing relatively the variation in number of persons employed and in pay-roll totals in each of the 54 industries surveyed by the Bureau of Labor Statistics, together with general indexes for the combined 12 groups of industries, appear in Table 6.

The general index in employment for October, 1928, is 88.1, this number being 0.9 per cent higher than the index for September, 1928, 2.4 per cent higher than the index for August, 1928, and 0.6 per cent higher than the index for October, 1927. The general index for pay-roll totals in October, 1928, is 94.8, this number being 3.7 per cent higher than the index for September, 1928, 5.1 per cent higher than the index for August, 1928, and 3.9 per cent higher than the index for October, 1927.

TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES—OCTOBER, 1927, AND AUGUST, SEPTEMBER, AND OCTOBER, 1928

[Monthly average, 1923=100]

| Industry | Employment | | | | Pay-roll totals | | | |
|---|------------|--------|-----------|---------|-----------------|--------|-----------|---------|
| | 1927 | 1928 | | | 1927 | 1928 | | |
| | October | August | September | October | October | August | September | October |
| General index | 87.6 | 86.0 | 87.3 | 88.1 | 91.2 | 90.2 | 91.4 | 94.8 |
| Food and kindred products | 92.6 | 87.0 | 89.8 | 91.9 | 96.3 | 92.2 | 94.9 | 96.8 |
| Slaughtering and meat packing..... | 79.6 | 79.1 | 78.6 | 79.6 | 82.9 | 81.8 | 83.5 | 84.1 |
| Confectionery..... | 97.5 | 71.6 | 85.1 | 96.1 | 104.5 | 78.5 | 91.8 | 105.4 |
| Ice cream..... | 86.7 | 106.5 | 96.9 | 86.6 | 94.0 | 116.8 | 105.4 | 93.9 |
| Flour..... | 91.2 | 88.7 | 90.0 | 91.4 | 97.7 | 94.0 | 95.6 | 100.5 |
| Baking..... | 105.6 | 100.8 | 104.2 | 104.7 | 110.8 | 106.2 | 109.7 | 109.9 |
| Sugar refining, cane..... | 95.9 | 89.7 | 87.4 | 90.1 | 97.3 | 95.6 | 92.2 | 97.2 |
| Textiles and their products | 87.6 | 79.1 | 80.6 | 83.1 | 90.2 | 77.6 | 80.1 | 85.5 |
| Cotton goods..... | 87.9 | 73.6 | 75.1 | 78.2 | 89.3 | 67.0 | 70.0 | 75.4 |
| Hosiery and knit goods..... | 98.1 | 87.9 | 90.6 | 92.3 | 117.0 | 98.6 | 103.1 | 112.2 |
| Silk goods..... | 97.2 | 93.7 | 95.2 | 98.3 | 105.3 | 104.7 | 105.6 | 111.1 |
| Woolen and worsted goods..... | 79.8 | 74.8 | 73.2 | 77.4 | 80.4 | 71.8 | 70.4 | 78.2 |
| Carpets and rugs..... | 94.0 | 90.3 | 90.7 | 96.7 | 90.5 | 81.4 | 84.7 | 90.8 |
| Dyeing and finishing textiles..... | 100.1 | 93.5 | 94.6 | 97.3 | 106.3 | 94.2 | 97.4 | 104.1 |
| Clothing, men's..... | 83.1 | 78.7 | 78.5 | 77.4 | 75.4 | 72.1 | 70.7 | 69.1 |
| Shirts and collars..... | 81.2 | 72.0 | 75.4 | 78.6 | 85.8 | 70.5 | 73.3 | 81.1 |
| Clothing, women's..... | 84.1 | 78.0 | 82.6 | 86.4 | 90.3 | 77.8 | 85.0 | 94.7 |
| Millinery and lace goods..... | 67.0 | 63.5 | 67.6 | 65.6 | 73.1 | 66.3 | 73.1 | 67.9 |
| Iron and steel and their products | 82.6 | 84.7 | 85.7 | 86.4 | 84.4 | 90.2 | 90.3 | 95.2 |
| Iron and steel..... | 87.6 | 88.8 | 89.3 | 89.6 | 88.3 | 94.8 | 93.5 | 99.4 |
| Cast-iron pipe..... | 88.8 | 85.5 | 86.0 | 84.5 | 87.2 | 79.7 | 79.2 | 82.2 |
| Structural ironwork..... | 93.1 | 98.8 | 97.4 | 97.9 | 101.7 | 100.2 | 107.4 | 112.6 |
| Foundry and machine-shop products..... | 77.4 | 80.8 | 81.7 | 82.3 | 77.6 | 84.5 | 84.6 | 88.4 |
| Hardware..... | 79.7 | 77.7 | 79.6 | 79.5 | 86.7 | 84.0 | 86.4 | 90.8 |
| Machine tools..... | 91.9 | 97.2 | 108.8 | 112.3 | 101.0 | 114.0 | 128.2 | 136.7 |
| Steam fittings and steam and hot-water heating apparatus..... | 90.7 | 84.0 | 80.3 | 80.3 | 95.4 | 89.6 | 84.0 | 84.5 |
| Stoves..... | 82.1 | 76.2 | 79.3 | 83.2 | 84.1 | 71.2 | 78.4 | 88.0 |
| Lumber and its products | 84.5 | 81.1 | 81.8 | 81.9 | 94.5 | 88.0 | 89.6 | 91.4 |
| Lumber, sawmills..... | 79.8 | 77.4 | 77.7 | 77.2 | 90.0 | 84.7 | 85.7 | 86.2 |
| Lumber, millwork..... | 86.1 | 87.6 | 85.9 | 83.3 | 93.1 | 93.4 | 91.0 | 91.3 |
| Furniture..... | 99.7 | 90.1 | 93.7 | 97.3 | 111.1 | 96.0 | 102.3 | 109.7 |
| Leather and its products | 89.4 | 85.7 | 85.9 | 84.6 | 85.4 | 84.7 | 84.0 | 81.3 |
| Leather..... | 88.8 | 87.1 | 86.9 | 85.7 | 89.0 | 86.8 | 86.8 | 87.1 |
| Boots and shoes..... | 89.6 | 85.3 | 85.6 | 84.2 | 83.9 | 83.8 | 82.9 | 79.0 |
| Paper and printing | 104.2 | 101.7 | 102.1 | 103.5 | 113.7 | 110.7 | 112.5 | 115.1 |
| Paper and pulp..... | 93.3 | 90.2 | 90.5 | 90.5 | 99.5 | 96.3 | 96.2 | 99.2 |
| Paper boxes..... | 102.9 | 91.7 | 95.5 | 100.5 | 117.6 | 104.6 | 110.4 | 118.1 |
| Printing, book and job..... | 102.9 | 103.3 | 101.7 | 102.3 | 114.3 | 114.0 | 115.6 | 115.4 |
| Printing, newspapers..... | 116.4 | 115.7 | 116.7 | 118.5 | 125.3 | 122.9 | 125.6 | 128.8 |
| Chemicals and allied products | 92.6 | 86.9 | 93.2 | 93.4 | 98.3 | 94.5 | 98.3 | 100.3 |
| Chemicals..... | 96.3 | 91.5 | 95.4 | 97.2 | 108.9 | 103.0 | 104.7 | 111.3 |
| Fertilizers..... | 91.8 | 74.1 | 98.2 | 97.1 | 99.0 | 85.5 | 109.6 | 104.9 |
| Petroleum..... | 87.9 | 86.3 | 87.9 | 86.7 | 86.6 | 87.7 | 88.2 | 87.1 |
| Stone, clay, and glass products | 93.4 | 93.4 | 93.1 | 91.3 | 100.6 | 99.7 | 97.7 | 99.6 |
| Cement..... | 90.0 | 86.2 | 83.6 | 82.2 | 96.1 | 92.4 | 88.3 | 88.3 |
| Brick, tile, and terra cotta..... | 92.8 | 91.7 | 89.8 | 87.0 | 96.3 | 94.5 | 91.4 | 90.4 |
| Pottery..... | 98.6 | 101.1 | 101.8 | 104.0 | 111.1 | 107.0 | 105.4 | 110.1 |
| Glass..... | 93.3 | 94.7 | 96.5 | 94.0 | 102.5 | 104.6 | 104.3 | 108.3 |
| Metal products, other than iron and steel | 87.9 | 90.8 | 91.8 | 93.4 | 86.7 | 95.2 | 96.7 | 103.0 |
| Stamped and enameled ware..... | 83.4 | 84.3 | 84.6 | 85.1 | 82.7 | 82.6 | 81.2 | 85.5 |
| Brass, bronze, and copper products..... | 89.9 | 93.7 | 95.0 | 97.1 | 88.2 | 99.9 | 102.4 | 109.5 |
| Tobacco products | 89.8 | 82.9 | 84.7 | 86.7 | 92.3 | 83.3 | 86.1 | 88.3 |
| Chewing and smoking tobacco and snuff..... | 95.7 | 87.1 | 87.9 | 88.0 | 102.2 | 91.7 | 93.5 | 95.5 |
| Cigars and cigarettes..... | 89.0 | 82.4 | 84.3 | 86.5 | 91.1 | 81.2 | 85.2 | 87.4 |

TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES—OCTOBER, 1927, AND AUGUST, SEPTEMBER, AND OCTOBER, 1928—Continued

| Industry | Employment | | | | Pay-roll totals | | | |
|--|-------------|-------------|-------------|-------------|-----------------|-------------|-------------|-------------|
| | 1927 | 1928 | | | 1927 | 1928 | | |
| | October | August | September | October | October | August | September | October |
| Vehicles for land transportation | 80.9 | 91.4 | 92.6 | 91.5 | 84.3 | 94.5 | 94.1 | 96.5 |
| Automobiles..... | 95.2 | 130.0 | 133.7 | 131.9 | 98.1 | 135.7 | 136.4 | 141.8 |
| Carriages and wagons..... | 74.8 | 76.1 | 81.8 | 75.7 | 81.5 | 80.8 | 88.3 | 83.1 |
| Car building and repairing, electric-railroad..... | 90.0 | 82.8 | 82.3 | 82.2 | 91.2 | 85.8 | 82.9 | 85.8 |
| Car building and repairing, steam-railroad..... | 71.4 | 67.8 | 67.4 | 66.8 | 74.9 | 69.0 | 67.8 | 71.9 |
| Miscellaneous Industries | 90.8 | 87.5 | 88.8 | 90.2 | 96.5 | 91.1 | 93.5 | 95.1 |
| Agricultural implements..... | 87.6 | 102.9 | 102.2 | 107.6 | 98.4 | 122.9 | 117.0 | 127.2 |
| Electrical machinery, apparatus, and supplies..... | 95.1 | 93.2 | 96.7 | 98.6 | 100.4 | 99.2 | 101.3 | 106.6 |
| Pianos and organs..... | 87.8 | 71.9 | 72.8 | 74.1 | 100.0 | 75.9 | 80.4 | 84.0 |
| Rubber boots and shoes..... | 92.0 | 80.4 | 85.2 | 87.7 | 105.1 | 84.3 | 94.1 | 95.3 |
| Automobile tires..... | 102.1 | 120.1 | 120.6 | 119.2 | 104.3 | 126.8 | 131.5 | 126.7 |
| Shipbuilding..... | 84.9 | 72.0 | 72.2 | 73.5 | 91.6 | 74.2 | 76.6 | 77.4 |

Table 7 shows the general index of employment in manufacturing industries and the general index of pay-roll totals, by months, from January, 1923, to October, 1928.

Following Table 7 is a chart which represents the 54 industries combined and shows, by months, the course of pay-roll totals as well as the course of employment. It includes the years 1924, 1925, and 1926, as well as 1927, and January, February, March, April, May, June, July, August, September, and October, 1928.

TABLE 7.—GENERAL INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, JANUARY, 1923, TO OCTOBER, 1928

[Monthly average, 1923=100]

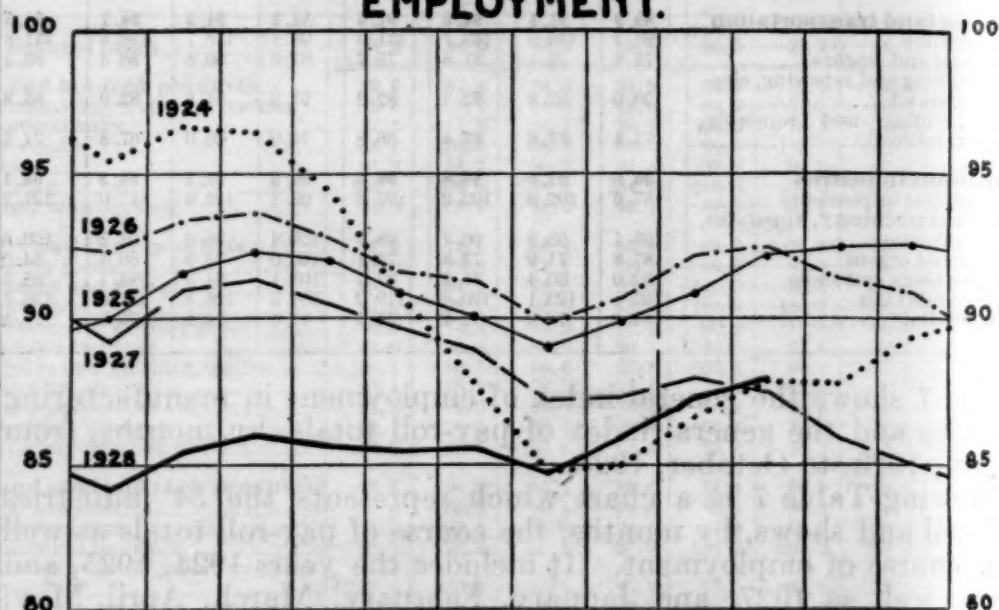
| Month | Employment | | | | | | Pay-roll totals | | | | | |
|----------------------|--------------|-------------|-------------|-------------|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|-------------|
| | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 |
| January..... | 98.0 | 95.4 | 90.0 | 92.3 | 89.4 | 84.2 | 91.8 | 94.5 | 90.0 | 93.9 | 90.9 | 85.8 |
| February..... | 99.6 | 96.6 | 91.6 | 93.3 | 91.0 | 85.5 | 95.2 | 99.4 | 95.1 | 97.9 | 96.4 | 90.0 |
| March..... | 101.8 | 96.4 | 92.3 | 93.7 | 91.4 | 86.1 | 100.3 | 99.0 | 96.6 | 99.1 | 97.7 | 91.2 |
| April..... | 101.8 | 94.5 | 92.1 | 92.8 | 90.6 | 85.7 | 101.3 | 96.9 | 94.2 | 97.2 | 96.6 | 89.9 |
| May..... | 101.8 | 90.8 | 90.9 | 91.7 | 89.7 | 85.5 | 104.8 | 92.4 | 94.4 | 95.6 | 95.6 | 90.1 |
| June..... | 101.9 | 87.9 | 90.1 | 91.3 | 89.1 | 85.6 | 104.7 | 87.0 | 91.7 | 95.5 | 93.3 | 90.2 |
| July..... | 100.4 | 84.8 | 89.3 | 89.8 | 87.3 | 84.7 | 99.9 | 80.8 | 89.6 | 91.2 | 89.1 | 87.4 |
| August..... | 99.7 | 85.0 | 89.9 | 90.7 | 87.4 | 86.0 | 99.3 | 83.5 | 91.4 | 94.6 | 91.0 | 90.2 |
| September..... | 99.8 | 86.7 | 90.9 | 92.2 | 88.0 | 87.3 | 100.0 | 86.0 | 90.4 | 95.1 | 90.1 | 91.4 |
| October..... | 99.3 | 87.9 | 92.3 | 92.5 | 87.6 | 88.1 | 102.3 | 88.5 | 96.2 | 98.6 | 91.2 | 94.8 |
| November..... | 98.7 | 87.8 | 92.5 | 91.4 | 85.9 | ----- | 101.0 | 87.6 | 96.2 | 95.4 | 87.8 | ----- |
| December..... | 96.9 | 89.4 | 92.6 | 90.9 | 85.1 | ----- | 98.9 | 91.7 | 97.3 | 95.6 | 89.3 | ----- |
| Average | 100.0 | 96.3 | 91.2 | 91.9 | 88.5 | 85.9 | 100.0 | 90.6 | 93.6 | 95.8 | 92.4 | 90.1 |

¹ Average for 10 months.

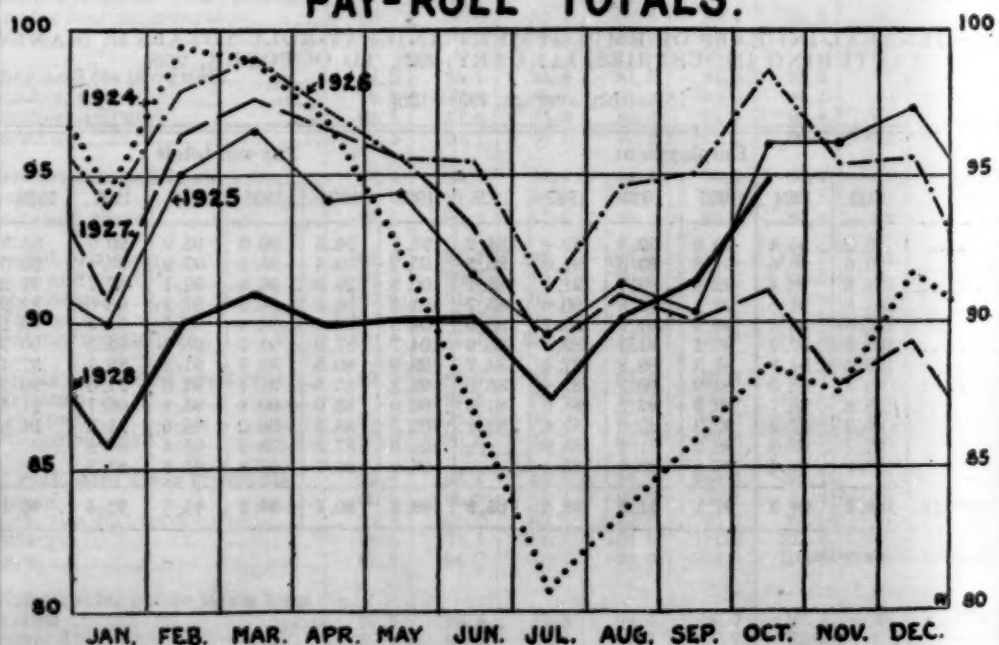
MANUFACTURING INDUSTRIES. MONTHLY INDEXES, 1924-1928.

MONTHLY AVERAGE 1923 = 100.

EMPLOYMENT.



PAY-ROLL TOTALS.



Proportion of Time Worked and Force Employed in Selected Manufacturing Industries in October, 1928

REPORTS as to time worked and force employed in October were made by 9,473 establishments in the 54 separate industries. Employees in 84 per cent of these establishments were working full time and employees in 16 per cent were working part time, while 1 per cent of the establishments was idle; 36 per cent of the establishments had a full normal force of employees and 63 per cent were operating with reduced forces.

The establishments in operation had an average of 90 per cent of a normal force of employees who were working an average of 98 per cent of full time. These percentages show no change in average force employed as compared with the September report, with an increase of 1 per cent in average operating time.

TABLE 8.—ESTABLISHMENTS IN WHICH EMPLOYEES WORKED FULL AND PART TIME AND WHICH EMPLOYED FULL AND PART WORKING FORCE IN OCTOBER, 1928

| Industry | Establishments reporting— | | Operating establishments only | | | | | |
|---|---------------------------|---------------|---|-----------|---|--|-------------------|--|
| | | | Per cent of establishments in which employees worked— | | Average per cent of full time worked by employees in establishments operating | Per cent of establishments operating with— | | Average per cent of full normal force employed in establishments operating |
| | Total number | Per cent idle | Full time | Part time | | Full normal force | Part normal force | |
| Food and kindred products | 1,472 | (1) | 91 | 9 | 99 | 38 | 61 | 90 |
| Slaughtering and meat packing..... | 154 | | 88 | 12 | 99 | 44 | 56 | 85 |
| Confectionery..... | 260 | (1) | 85 | 14 | 99 | 30 | 69 | 89 |
| Ice cream..... | 187 | 1 | 93 | 6 | 99 | 6 | 94 | 71 |
| Flour..... | 281 | | 84 | 16 | 99 | 51 | 49 | 94 |
| Baking..... | 576 | (1) | 97 | 3 | 99 | 46 | 54 | 97 |
| Sugar refining, cane..... | 14 | | 71 | 29 | 95 | 14 | 86 | 86 |
| Textiles and their products | 1,563 | (1) | 84 | 15 | 97 | 39 | 61 | 88 |
| Cotton goods..... | 395 | | 82 | 18 | 96 | 32 | 68 | 85 |
| Hosiery and knit goods..... | 191 | 2 | 85 | 13 | 97 | 47 | 51 | 93 |
| Silk goods..... | 187 | | 89 | 11 | 98 | 47 | 53 | 95 |
| Woolen and worsted goods..... | 169 | | 83 | 17 | 98 | 38 | 62 | 84 |
| Carpets and rugs..... | 27 | | 96 | 4 | 98 | 37 | 63 | 96 |
| Dyeing and finishing textiles..... | 89 | | 67 | 33 | 95 | 34 | 66 | 90 |
| Clothing, men's..... | 229 | 1 | 87 | 12 | 98 | 40 | 59 | 84 |
| Shirts and collars..... | 89 | | 90 | 10 | 98 | 45 | 55 | 92 |
| Clothing, women's..... | 136 | 1 | 88 | 12 | 99 | 40 | 59 | 90 |
| Millinery and lace goods..... | 51 | | 82 | 18 | 97 | 18 | 82 | 83 |
| Iron and steel and their products | 1,594 | 1 | 74 | 25 | 97 | 32 | 68 | 87 |
| Iron and steel..... | 154 | 3 | 79 | 18 | 96 | 25 | 72 | 87 |
| Cast-iron pipe..... | 32 | | 53 | 47 | 87 | 19 | 81 | 75 |
| Structural ironwork..... | 154 | 1 | 86 | 14 | 99 | 38 | 62 | 92 |
| Foundry and machine-shop products..... | 868 | (1) | 72 | 28 | 96 | 29 | 70 | 85 |
| Hardware..... | 54 | | 56 | 44 | 94 | 20 | 80 | 83 |
| Machine tools..... | 136 | | 91 | 9 | 102 | 49 | 51 | 103 |
| Steam fittings and steam and hot-water heating apparatus..... | 104 | 1 | 68 | 31 | 95 | 34 | 65 | 84 |
| Stoves..... | 92 | | 68 | 32 | 95 | 42 | 58 | 92 |
| Lumber and its products | 958 | 1 | 86 | 19 | 98 | 36 | 69 | 85 |
| Lumber, sawmills..... | 393 | 1 | 83 | 16 | 98 | 30 | 69 | 86 |
| Lumber, millwork..... | 215 | (1) | 78 | 22 | 97 | 21 | 79 | 77 |
| Furniture..... | 350 | 1 | 77 | 22 | 99 | 35 | 64 | 92 |
| Leather and its products | 291 | | 77 | 23 | 96 | 36 | 64 | 89 |
| Leather..... | 112 | | 85 | 15 | 98 | 29 | 71 | 84 |
| Boots and shoes..... | 179 | | 72 | 28 | 94 | 41 | 59 | 90 |

¹ Less than one-half of 1 per cent.

TABLE 8.—ESTABLISHMENTS IN WHICH EMPLOYEES WORKED FULL AND PART TIME AND WHICH EMPLOYED FULL AND PART WORKING FORCE IN OCTOBER, 1928—Continued

| Industry | Establishments reporting— | | Operating establishments only | | | | | |
|---|---------------------------|---------------|---|-----------|---|--|-------------------|--|
| | | | Per cent of establishments in which employees worked— | | Average per cent of full time worked by employees in establishments operating | Per cent of establishments operating with— | | Average per cent of full normal force employed in establishments operating |
| | Total number | Per cent idle | Full time | Part time | | Full normal force | Part normal force | |
| Paper and printing | 833 | (1) | 91 | 9 | 99 | 50 | 50 | 97 |
| Paper and pulp..... | 169 | 1 | 88 | 11 | 98 | 34 | 66 | 94 |
| Paper boxes..... | 161 | ----- | 88 | 12 | 99 | 36 | 64 | 92 |
| Printing, book and job..... | 261 | ----- | 91 | 9 | 99 | 43 | 57 | 97 |
| Printing, newspapers..... | 241 | ----- | 95 | 5 | 100 | 78 | 22 | 103 |
| Chemicals and allied products | 372 | ----- | 85 | 15 | 99 | 23 | 77 | 77 |
| Chemicals..... | 94 | ----- | 86 | 14 | 98 | 43 | 57 | 97 |
| Fertilizers..... | 140 | ----- | 79 | 21 | 99 | 10 | 90 | 53 |
| Petroleum refining..... | 38 | ----- | 100 | ----- | 100 | 21 | 79 | 77 |
| Stone, clay, and glass products | 696 | 4 | 87 | 9 | 96 | 34 | 62 | 87 |
| Cement..... | 91 | 1 | 97 | 2 | 100 | 34 | 65 | 84 |
| Brick, tile, and terra cotta..... | 394 | 5 | 86 | 9 | 98 | 31 | 63 | 84 |
| Pottery..... | 119 | 1 | 81 | 18 | 97 | 50 | 49 | 95 |
| Glass..... | 92 | 4 | 89 | 7 | 100 | 28 | 67 | 89 |
| Metal products other than iron and steel | 185 | ----- | 75 | 25 | 98 | 34 | 66 | 93 |
| Stamped and enameled ware..... | 51 | ----- | 82 | 18 | 99 | 43 | 57 | 90 |
| Brass, bronze, and copper products..... | 134 | ----- | 72 | 28 | 97 | 31 | 69 | 94 |
| Tobacco products | 214 | (1) | 75 | 24 | 97 | 47 | 53 | 97 |
| Chewing and smoking tobacco and snuff..... | 26 | ----- | 65 | 35 | 98 | 35 | 65 | 87 |
| Cigars and cigarettes..... | 188 | 1 | 77 | 23 | 96 | 48 | 51 | 99 |
| Vehicles for land transportation | 1,047 | ----- | 88 | 12 | 99 | 31 | 69 | 96 |
| Automobiles..... | 181 | ----- | 90 | 10 | 98 | 60 | 40 | 108 |
| Carriages and wagons..... | 45 | ----- | 76 | 24 | 97 | 24 | 76 | 71 |
| Car building and repairing, electric-railroad..... | 330 | ----- | 92 | 8 | 100 | 26 | 74 | 88 |
| Car building and repairing, steam-railroad..... | 491 | ----- | 86 | 14 | 98 | 24 | 76 | 78 |
| Miscellaneous industries | 349 | (1) | 83 | 17 | 98 | 41 | 59 | 93 |
| Agricultural implements..... | 65 | ----- | 75 | 25 | 97 | 35 | 65 | 103 |
| Electrical machinery, apparatus, and supplies..... | 135 | ----- | 84 | 16 | 99 | 41 | 59 | 94 |
| Pianos and organs..... | 39 | ----- | 77 | 23 | 97 | 31 | 69 | 73 |
| Rubber boots and shoes..... | 12 | ----- | 83 | 17 | 98 | 42 | 58 | 92 |
| Automobile tires..... | 43 | ----- | 84 | 16 | 97 | 60 | 40 | 102 |
| Shipbuilding..... | 55 | 2 | 91 | 7 | 99 | 38 | 60 | 66 |
| All industries | 9,473 | 1 | 84 | 16 | 98 | 36 | 63 | 90 |

¹ Less than one-half of 1 per cent.

2. Employment in Coal Mining in October, 1928

EMPLOYMENT in coal mining—anthracite and bituminous combined—increased 5.9 per cent in October, 1928, as compared with September, and pay-roll totals increased 17.7 per cent. The 319 establishments reporting had 92,036 employees in October and pay-roll totals in one week of \$2,669,445.

Anthracite

EMPLOYMENT in anthracite mines alone was 5.8 per cent greater in October, 1928, than in September, and pay-roll totals were 28.3 per cent higher, as shown by returns from 41 establishments having in October 22,878 employees whose combined earnings in one week were \$828,956, and in September 21,633 employees whose combined earnings in one week were \$645,950. All of the anthracite mines reported are in Pennsylvania.

Bituminous Coal

EMPLOYMENT in bituminous coal mines was 6 per cent greater in October, 1928, than in September, and pay-roll totals were 13.5 per cent greater, as shown by reports from 278 establishments having in October 69,158 employees whose combined earnings in one week were \$1,840,489.

The East North Central and the West North Central geographic divisions showed increases in employment of 29.9 per cent and 45.6 per cent, respectively, mining operations having been resumed in October in many mines which either were idle in September or just resuming operations. The increase in pay-roll totals in October in the West North Central States was 140 per cent.

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **BITUMINOUS COAL MINES** DURING **ONE WEEK** EACH IN SEPTEMBER AND OCTOBER, 1928

| Geographic division ¹ | Establishments | Number on pay roll | | Per cent of change | Amount of pay roll | | Per cent of change |
|----------------------------------|----------------|--------------------|---------------|--------------------|--------------------|------------------|--------------------|
| | | September, 1928 | October, 1928 | | September, 1928 | October, 1928 | |
| New England..... | | | | | | | |
| Middle Atlantic..... | 100 | 25,188 | 25,176 | — ⁽²⁾ | \$656,745 | \$714,807 | +8.8 |
| East North Central..... | 51 | 10,284 | 13,361 | +29.9 | 318,570 | 403,351 | +26.6 |
| West North Central..... | 12 | 1,126 | 1,639 | +45.6 | 17,867 | 42,885 | +140.0 |
| South Atlantic..... | 47 | 10,824 | 10,959 | +1.2 | 241,307 | 264,903 | +9.8 |
| East South Central..... | 54 | 15,858 | 15,980 | +0.8 | 326,247 | 349,275 | +7.1 |
| West South Central..... | 3 | 263 | 270 | +2.7 | 7,454 | 8,564 | +14.9 |
| Mountain..... | 11 | 1,731 | 1,773 | +2.4 | 53,247 | 56,704 | +6.5 |
| Pacific..... | | | | | | | |
| All divisions..... | 278 | 65,274 | 69,158 | +6.0 | 1,621,437 | 1,840,489 | +13.5 |

¹ See footnotes 3 to 11, p. 195.

² Less than one-tenth of 1 per cent.

3. Employment in Public Utilities in October, 1928

EMPLOYMENT in public utilities decreased 0.4 per cent in October as compared with September, although pay-roll totals increased 2.6 per cent. These changes are based on returns from 2,445 establishments, including electric railway, electric power and light, gas, water, telephone, and telegraph companies. These establishments in October had 356,894 employees, whose combined earnings in one week were \$10,795,725.

The Middle Atlantic, South Atlantic, West South Central, and Mountain geographic divisions showed small increases in employment, and the remaining five divisions showed fewer employees than in September. The total change however was less than 1,500 employees.

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL PUBLIC UTILITIES ESTABLISHMENTS DURING ONE WEEK EACH IN SEPTEMBER AND OCTOBER, 1928, BY GEOGRAPHIC DIVISIONS

| Geographic division ¹ | Establishments | Number on pay roll | | Per cent of change | Amount of pay roll | | Per cent of change |
|----------------------------------|----------------|--------------------|-----------------|--------------------|---------------------|---------------------|--------------------|
| | | September, 1928 | October, 1928 | | September, 1928 | October, 1928 | |
| New England..... | 182 | 27, 979 | 27, 860 | -0.4 | \$927, 557 | \$924, 636 | -0.3 |
| Middle Atlantic..... | 596 | 85, 004 | 85, 413 | +0.5 | 2, 520, 232 | 2, 557, 338 | +1.5 |
| East North Central..... | 652 | 119, 676 | 118, 314 | -1.1 | 3, 716, 168 | 3, 823, 022 | +2.9 |
| West North Central..... | 151 | 23, 535 | 23, 123 | -1.8 | 658, 737 | 660, 986 | +1.7 |
| South Atlantic..... | 156 | 28, 582 | 28, 916 | +1.2 | 707, 383 | 762, 278 | +7.8 |
| East South Central..... | 46 | 3, 679 | 3, 472 | -5.6 | 100, 078 | 93, 829 | -6.2 |
| West South Central..... | 48 | 7, 432 | 7, 736 | +4.1 | 189, 736 | 196, 503 | +3.6 |
| Mountain..... | 476 | 42, 502 | 42, 863 | +0.8 | 1, 106, 610 | 1, 183, 901 | +7.0 |
| Pacific..... | 138 | 19, 963 | 19, 197 | -3.8 | 597, 942 | 584, 232 | -2.3 |
| All divisions..... | 2, 445 | 358, 352 | 356, 894 | -0.4 | 10, 524, 443 | 10, 795, 725 | +2.6 |

¹ See footnotes 3 to 11, p. 195.

4. Employment in Wholesale and Retail Trade in October, 1928

EMPLOYMENT in 2,516 establishments—wholesale and retail trade combined—increased 5.7 per cent in October as compared with September, 1928, and pay-roll totals increased 4.6 per cent. These establishments in October had 154,683 employees whose combined earnings in one week were \$3,846,912.

Wholesale Trade

EMPLOYMENT in wholesale trade in October was 0.1 per cent greater than in September, 1928, and pay-roll totals were 1.3 per cent higher, as shown by returns from 966 establishments having in October 30,651 employees whose combined earnings in one week were \$887,129.

Five of the 9 geographic divisions showed increased employment, while decreases appeared in the remaining 4 divisions, the total difference between the two months having been 42 employees only.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL WHOLESALE TRADE ESTABLISHMENTS DURING ONE WEEK EACH IN SEPTEMBER AND OCTOBER, 1928, BY GEOGRAPHIC DIVISIONS

| Geographic division ¹ | Establishments | Number on pay roll | | Per cent of change | Amount of pay roll | | Per cent of change |
|----------------------------------|----------------|--------------------|----------------|--------------------|--------------------|-----------------|--------------------|
| | | September, 1928 | October, 1928 | | September, 1928 | October, 1928 | |
| New England..... | 56 | 1, 351 | 1, 362 | +0.8 | \$38, 507 | \$38, 714 | +0.5 |
| Middle Atlantic..... | 187 | 6, 751 | 6, 870 | +1.8 | 204, 008 | 207, 221 | +1.6 |
| East North Central..... | 165 | 6, 487 | 6, 559 | +1.1 | 181, 320 | 187, 920 | +3.6 |
| West North Central..... | 109 | 6, 585 | 6, 581 | -0.1 | 170, 784 | 178, 628 | +4.6 |
| South Atlantic..... | 114 | 2, 783 | 2, 724 | -2.1 | 80, 285 | 80, 900 | +0.8 |
| East South Central..... | 210 | 1, 875 | 1, 736 | -7.4 | 54, 840 | 46, 580 | -15.1 |
| West South Central..... | 47 | 1, 978 | 2, 044 | +3.3 | 57, 037 | 58, 095 | +1.9 |
| Mountain..... | 13 | 285 | 288 | +1.1 | 10, 795 | 10, 495 | -2.8 |
| Pacific..... | 65 | 2, 514 | 2, 487 | -1.1 | 77, 775 | 78, 576 | +1.0 |
| All divisions..... | 966 | 30, 609 | 30, 651 | +0.1 | 875, 351 | 887, 129 | +1.3 |

¹ See footnotes 3 to 11, p. 195.

Retail Trade

EMPLOYMENT in retail trade was 7.1 per cent greater in October than in September, 1928, and pay-roll totals were 5.6 per cent higher, as shown by reports from 1,550 establishments having in October 124,032 employees whose combined earnings in one week were \$2,959,783.

Employment increased in October in every one of the 9 geographic divisions except the New England division, which fell off 0.1 per cent. The increases ranged from 11.4 per cent in the Middle Atlantic States to 2.9 per cent in the East North Central States.

TABLE 2.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **RETAIL TRADE** ESTABLISHMENTS DURING **ONE WEEK** EACH IN SEPTEMBER AND OCTOBER, 1928, BY GEOGRAPHIC DIVISIONS

| Geographic division ¹ | Estab-lish-ments | Number on pay roll | | Per cent of change | Amount of pay roll | | Per cent of change |
|----------------------------------|------------------|--------------------|----------------|--------------------|--------------------|------------------|--------------------|
| | | Septem-ber, 1928 | October, 1928 | | Septem-ber, 1928 | October, 1928 | |
| New England..... | 14 | 5,013 | 5,008 | -0.1 | \$107,919 | \$109,902 | +1.8 |
| Middle Atlantic..... | 146 | 28,889 | 32,174 | +11.4 | 749,098 | 803,939 | +7.3 |
| East North Central..... | 83 | 32,229 | 33,150 | +2.9 | 882,911 | 923,882 | +4.6 |
| West North Central..... | 61 | 8,232 | 9,159 | +11.3 | 173,550 | 182,919 | +5.4 |
| South Atlantic..... | 509 | 13,153 | 14,523 | +10.4 | 270,482 | 294,915 | +9.0 |
| East South Central..... | 93 | 2,961 | 3,204 | +8.2 | 57,513 | 60,755 | +5.6 |
| West South Central..... | 36 | 4,127 | 4,480 | +8.6 | 79,509 | 84,546 | +6.3 |
| Mountain..... | 25 | 1,048 | 1,090 | +4.0 | 18,624 | 20,177 | +8.3 |
| Pacific..... | 583 | 20,117 | 21,244 | +5.6 | 463,363 | 478,748 | +3.3 |
| All divisions..... | 1,550 | 115,769 | 124,032 | +7.1 | 2,802,969 | 2,959,783 | +5.6 |

¹ See footnotes 3 to 11, p. 195.

Employment on Steam Railroads in the United States

THE monthly trend of employment from January, 1923, to September, 1928, on Class I railroads—that is, all roads having operating revenues of \$1,000,000 or over—is shown by the index numbers published in Table 1. These index numbers are constructed from monthly reports of the Interstate Commerce Commission, using the monthly average for 1923 as 100.

TABLE 1.—INDEX OF EMPLOYMENT ON CLASS I STEAM RAILROADS IN THE UNITED STATES, JANUARY, 1923, TO SEPTEMBER, 1928

[Monthly average, 1923=100]

| Month | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 |
|---------------------|--------------|-------------|-------------|-------------|-------------|--------------|
| January..... | 94.6 | 93.1 | 91.9 | 92.1 | 91.8 | 85.8 |
| February..... | 94.8 | 93.2 | 91.7 | 92.3 | 91.6 | 85.5 |
| March..... | 96.6 | 93.6 | 91.5 | 92.9 | 92.1 | 86.4 |
| April..... | 98.0 | 95.0 | 92.8 | 95.0 | 93.6 | 88.1 |
| May..... | 100.9 | 95.3 | 94.0 | 96.3 | 95.5 | 90.8 |
| June..... | 102.9 | 94.2 | 94.8 | 97.6 | 97.0 | 92.2 |
| July..... | 104.0 | 94.3 | 95.5 | 98.9 | 97.1 | 91.9 |
| August..... | 105.1 | 95.1 | 95.8 | 98.7 | 95.6 | 92.0 |
| September..... | 103.6 | 95.8 | 96.0 | 98.8 | 95.2 | 91.6 |
| October..... | 103.1 | 96.9 | 96.8 | 99.4 | 95.0 | ----- |
| November..... | 101.1 | 95.1 | 95.2 | 97.3 | 92.0 | ----- |
| December..... | 95.5 | 92.3 | 93.3 | 94.4 | 88.3 | ----- |
| Average..... | 100.0 | 94.5 | 94.1 | 96.1 | 93.7 | 189.4 |

¹ Average for 9 months.

Table 2 shows the total number of employees on the 15th day each of September, 1927, and August and September, 1928, and pay-roll totals for each of the entire months considered, by principal occupational groups and various important occupations.

In these tabulations data for the occupational group reported as "executives, officials, and staff assistants" are omitted.

TABLE 2.—EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES—SEPTEMBER, 1927, AND AUGUST AND SEPTEMBER, 1928

[From monthly reports of Interstate Commerce Commission. As data for only the more important occupations are shown separately, the group totals are not the sum of the items under the respective groups]

| Occupation | Number of employees at middle of month | | | Total earnings | | |
|---|--|------------------|------------------|---------------------|---------------------|---------------------|
| | Sep-tember, 1927 | August, 1928 | Sep-tember, 1928 | Sep-tember, 1927 | August, 1928 | Sep-tember, 1928 |
| Professional, clerical, and general. | 279,745 | 271,959 | 271,510 | \$39,585,009 | \$39,889,239 | \$38,716,280 |
| Clerks..... | 162,016 | 155,528 | 155,676 | 21,714,252 | 21,773,201 | 20,971,704 |
| Stenographers and typists..... | 25,083 | 24,663 | 24,588 | 3,170,307 | 3,233,501 | 3,136,328 |
| Maintenance of way and structures. | 454,129 | 452,338 | 438,817 | 41,487,966 | 43,842,056 | 39,531,677 |
| Laborers, extra gang and work train..... | 80,626 | 80,445 | 74,849 | 6,260,893 | 6,778,643 | 5,702,790 |
| Laborers, track and roadway section..... | 233,900 | 234,461 | 227,883 | 16,859,456 | 18,136,179 | 15,982,452 |
| Maintenance of equipment and stores. | 480,999 | 456,807 | 456,192 | 62,816,643 | 62,521,808 | 58,750,754 |
| Carmen..... | 103,790 | 99,453 | 100,056 | 15,358,527 | 15,506,575 | 14,527,895 |
| Machinists..... | 57,836 | 55,119 | 54,902 | 9,006,795 | 8,999,140 | 8,393,924 |
| Skilled trades helpers..... | 105,944 | 100,221 | 100,131 | 11,684,688 | 11,640,107 | 10,865,291 |
| Laborers (shops, engine houses, power plants, and stores)..... | 40,369 | 37,361 | 37,352 | 3,799,321 | 3,616,597 | 3,492,359 |
| Common laborers (shops, engine houses, power plants, and stores)..... | 54,472 | 52,536 | 51,981 | 4,360,541 | 4,438,426 | 4,044,994 |
| Transportation, other than train, engine, and yard. | 207,191 | 198,643 | 200,432 | 25,703,568 | 25,729,766 | 24,897,059 |
| Station agents..... | 30,327 | 29,868 | 29,779 | 4,757,548 | 4,889,325 | 4,664,403 |
| Telegraphers, telephoners, and towermen..... | 24,464 | 23,449 | 23,461 | 3,712,754 | 3,701,318 | 3,578,341 |
| Truckers (stations, warehouses, and platforms)..... | 37,821 | 33,851 | 35,424 | 3,635,708 | 3,412,666 | 3,346,383 |
| Crossing and bridge flagmen and gatemen..... | 21,921 | 21,284 | 21,132 | 1,689,082 | 1,644,246 | 1,627,078 |
| Transportation (yard masters, switch tenders, and hostlers)..... | 23,146 | 22,053 | 22,072 | 4,451,053 | 4,463,245 | 4,318,821 |
| Transportation, train and engine. | 325,550 | 312,105 | 316,967 | 67,050,110 | 66,604,750 | 65,603,565 |
| Road conductors..... | 37,080 | 35,676 | 36,200 | 9,076,401 | 8,864,824 | 8,699,119 |
| Road brakemen and flagmen..... | 74,141 | 70,645 | 72,081 | 13,436,554 | 12,850,154 | 12,737,865 |
| Yard brakemen and yard helpers..... | 53,545 | 51,297 | 51,994 | 9,668,729 | 9,596,648 | 9,420,835 |
| Road engineers and motormen..... | 44,402 | 42,268 | 42,860 | 12,062,898 | 12,192,193 | 12,061,045 |
| Road firemen and helpers..... | 45,386 | 42,884 | 43,522 | 9,048,616 | 9,005,866 | 8,905,004 |
| Total, all employees..... | 1,770,760 | 1,713,905 | 1,705,990 | 241,094,349 | 243,049,864 | 231,818,156 |

Unemployment of Organized Building-Trades Workers in Massachusetts, April, 1927, to October, 1928

THE extent of unemployment of organized building-trades workers in Massachusetts from April 1, 1927, to October 1, 1928, by cause and by occupation, is shown in the accompanying tables. The figures have been compiled from press releases issued by the Massachusetts Department of Labor and Industries, which began publishing the data monthly as of April 1, 1927.

TABLE 1.—PER CENT OF ORGANIZED BUILDING-TRADES WORKERS UNEMPLOYED ON SPECIFIED DATES, BY CAUSE, APRIL, 1927, TO OCTOBER, 1928

| Date | Cause of unemployment | | | | | |
|--------------|---------------------------|-------------------|--------------------------------|---------------------|------------------|------------|
| | Lack of work or materials | Strike or lockout | Sickness, accident, or old age | Unfavorable weather | Other reasons | All causes |
| 1927: | | | | | | |
| Apr. 1..... | 24.7 | 0.1 | 1.7 | 0.3 | 0.6 | 27.4 |
| May 2..... | 17.8 | .1 | 1.8 | .1 | (¹) | 19.9 |
| June 1..... | 15.6 | .9 | 1.7 | .3 | (¹) | 18.4 |
| July 1..... | 15.3 | .3 | 1.4 | .2 | (¹) | 17.2 |
| Aug. 1..... | 12.4 | .1 | 1.9 | .2 | (¹) | 14.7 |
| Sept. 1..... | 12.8 | .1 | 1.7 | .6 | (¹) | 15.3 |
| Oct. 3..... | 11.4 | .3 | 1.7 | .1 | (¹) | 13.5 |
| Nov. 1..... | 12.0 | .1 | 1.5 | .1 | (¹) | 13.7 |
| Dec. 1..... | 16.2 | (¹) | 2.0 | .6 | .3 | 19.1 |
| 1928: | | | | | | |
| Jan. 3..... | 20.8 | .8 | 2.1 | 3.4 | .2 | 27.3 |
| Feb. 1..... | 27.4 | .1 | 1.7 | .2 | (¹) | 29.4 |
| Mar. 1..... | 28.9 | .2 | 1.7 | 3.4 | (¹) | 34.1 |
| Apr. 2..... | 26.9 | .2 | 1.7 | .1 | (¹) | 28.9 |
| May 1..... | 22.2 | .2 | 1.4 | .1 | .2 | 24.1 |
| June 1..... | 16.9 | 4.0 | 1.6 | .3 | .1 | 22.9 |
| July 2..... | 12.8 | .1 | 1.4 | .2 | ----- | 14.6 |
| Aug. 1..... | 11.3 | .2 | 1.5 | .1 | .1 | 13.2 |
| Sept. 4..... | 14.1 | .1 | 1.6 | (¹) | ----- | 15.8 |
| Oct. 1..... | 15.3 | (¹) | 1.8 | .1 | ----- | 17.2 |

¹ Less than one-tenth of 1 per cent.

TABLE 2.—PER CENT OF ORGANIZED BUILDING-TRADES WORKERS UNEMPLOYED ON SPECIFIED DATES, BY OCCUPATION, APRIL, 1927, TO OCTOBER, 1928

| Date | Bricklayers, masons, and plasterers | Carpenters | Electrical workers | Hod carriers and building laborers | Lathers | Painters, decorators, and paper hangers | Plumbers, gas fitters, and steam fitters | Sheet-metal workers | Other occupations | All occupations |
|--------------|-------------------------------------|------------|--------------------|------------------------------------|---------|---|--|---------------------|-------------------|-----------------|
| 1927: | | | | | | | | | | |
| Apr. 1..... | 30.2 | 27.7 | 16.1 | 30.5 | 22.0 | 23.7 | 31.5 | 18.3 | 26.5 | 27.4 |
| May 2..... | 15.8 | 16.8 | 11.4 | 31.7 | 19.4 | 17.7 | 26.9 | 11.6 | 19.7 | 19.9 |
| June 1..... | 16.6 | 15.4 | 12.5 | 28.1 | 13.8 | 16.9 | 27.8 | 16.9 | 14.5 | 18.4 |
| July 1..... | 12.2 | 13.5 | 12.5 | 27.7 | 10.5 | 24.4 | 21.3 | 19.6 | 13.0 | 17.2 |
| Aug. 1..... | 10.8 | 15.1 | 15.4 | 16.8 | 8.6 | 13.2 | 15.2 | 19.5 | 14.0 | 14.7 |
| Sept. 1..... | 11.6 | 17.3 | 13.0 | 19.1 | 11.8 | 12.3 | 10.8 | 5.2 | 13.0 | 15.3 |
| Oct. 3..... | 10.0 | 12.2 | 9.0 | 19.9 | 6.3 | 20.9 | 6.0 | 4.2 | 13.7 | 13.5 |
| Nov. 1..... | 9.5 | 12.7 | 6.8 | 20.9 | 7.8 | 21.9 | 5.9 | 4.1 | 11.3 | 13.7 |
| Dec. 1..... | 15.4 | 15.7 | 10.8 | 35.3 | 16.9 | 30.7 | 11.0 | 6.2 | 5.7 | 19.1 |
| 1928: | | | | | | | | | | |
| Jan. 3..... | 23.1 | 25.8 | 15.7 | 37.6 | 24.4 | 42.4 | 17.1 | 15.9 | 17.1 | 27.3 |
| Feb. 1..... | 31.8 | 27.4 | 20.3 | 33.5 | 27.6 | 46.9 | 21.6 | 12.3 | 20.0 | 29.4 |
| Mar. 1..... | 35.0 | 31.6 | 22.5 | 38.1 | 26.6 | 48.6 | 30.7 | 12.7 | 28.1 | 34.1 |
| Apr. 2..... | 29.4 | 24.4 | 24.5 | 34.9 | 24.7 | 36.4 | 37.5 | 16.5 | 20.4 | 28.9 |
| May 1..... | 17.9 | 20.8 | 17.9 | 38.5 | 17.7 | 23.0 | 30.6 | 15.3 | 17.3 | 24.1 |
| June 1..... | 17.1 | 20.0 | 12.7 | 35.1 | 14.3 | 17.7 | 29.0 | 10.2 | 30.9 | 22.9 |
| July 2..... | 9.2 | 17.1 | 7.0 | 8.3 | 11.9 | 21.4 | 23.8 | 8.7 | 8.6 | 14.6 |
| Aug. 1..... | 11.0 | 16.8 | 5.0 | 10.9 | 13.1 | 14.1 | 16.3 | 5.5 | 3.3 | 13.2 |
| Sept. 4..... | 11.9 | 16.8 | 9.8 | 20.7 | 15.8 | 18.0 | 13.1 | 10.1 | 7.2 | 15.8 |
| Oct. 1..... | 14.1 | 16.8 | 6.1 | 30.2 | 18.4 | 17.4 | 8.1 | 7.8 | 10.0 | 17.2 |

Changes in Employment and Pay Rolls in Various States.

THE following data as to changes in employment and pay rolls have been compiled from reports received from the various State labor offices:

PER CENT OF CHANGES IN EMPLOYMENT AND PAY ROLLS IN SPECIFIED STATES

Monthly period

| State and industry group | Per cent of change, August to September, 1928 | | State and industry group | Employment—index numbers (1919-1923=100) | |
|--|---|----------|---|--|---------------|
| | Employment | Pay roll | | September, 1928 | October, 1928 |
| Illinois | | | Massachusetts | | |
| Stone, clay, and glass products | -1.3 | -5.8 | Boots and shoes | 71.8 | 71.1 |
| Metals, machinery, and conveyances | +1.5 | +1.1 | Bread and other bakery products | 106.1 | 104.8 |
| Wood products | +1.9 | +4.4 | Cars and general shop construction and repairs, steam railroads | 70.3 | 70.0 |
| Furs and leather goods | -2.4 | -4.6 | Clothing, men's and women's | 91.6 | 94.0 |
| Chemicals, oils, and paints | +8 | -9 | Confectionery | 91.4 | 101.8 |
| Printing and paper goods | -3 | -2 | Cotton goods | 42.2 | 54.3 |
| Textiles | +8.4 | +3.3 | Dyeing and finishing textiles | 98.3 | 101.6 |
| Clothing and millinery | -9 | -2.9 | Electrical machinery, apparatus, and supplies | 107.1 | 112.2 |
| Food, beverages, and tobacco | +4.1 | +5.6 | Foundry and machine-shop products | 66.6 | 67.0 |
| All manufacturing industries | +1.4 | +8 | Furniture | 103.5 | 107.9 |
| Trade, wholesale and retail | +2.4 | +4.2 | Hosiery and knit goods | 67.6 | 69.6 |
| Services | +1 | -5 | Jewelry | 106.1 | 108.0 |
| Public utilities | -3 | -8 | Leather, tanned, curried, and finished | 83.1 | 83.8 |
| Coal mining | +4.3 | +26.4 | Paper and wood pulp | 90.9 | 91.7 |
| Building and contracting | +1.3 | +4 | Printing and publishing | 106.6 | 108.7 |
| All industries | +1.1 | +1.0 | Rubber footwear | 97.6 | 100.9 |
| September to October, 1928 | | | Rubber goods, tires, and tubes | 91.9 | 89.5 |
| Iowa | | | Silk goods | 102.3 | 104.3 |
| Food and kindred products | +3.4 | | Textile machinery and parts | 49.2 | 47.7 |
| Textiles | +1.5 | | Woolen and worsted goods | 76.3 | 80.6 |
| Iron and steel works | +3.0 | | All industries | 75.6 | 78.8 |
| Lumber products | +2.1 | | Per cent of change, August to September, 1928 | | |
| Leather products | -1 | | Employment Pay roll | | |
| Paper products, printing and publishing | +3.8 | | New Jersey | | |
| Patent medicines, chemicals, and compounds | 0 | | Food and kindred products | +29.1 | +21.1 |
| Stone and clay products | -6.9 | | Textiles and their products | +5.3 | +2.7 |
| Tobacco and cigars | 0 | | Iron and steel and their products | +2.5 | +6.1 |
| Railway car shops | +9 | | Lumber and its products | +4.2 | +6.5 |
| Various industries | +8 | | Leather and its products | -1 | +1.1 |
| All industries | +1.6 | | Tobacco products | +2.2 | -4 |
| Maryland | | | Paper and printing | -8 | +1.4 |
| Food products | +3.1 | +3.9 | Chemicals and allied products | +2.2 | +3.0 |
| Textiles | +4.2 | +6.8 | Stone, clay, and glass products | +1.6 | +2.0 |
| Iron and steel and their products | -9.5 | -7.8 | Metal products other than iron and steel | +2.3 | +1.1 |
| Lumber and its products | +6.8 | +4.2 | Vehicles for land transportation | +4.9 | +3.0 |
| Leather and its products | +5.3 | -1.0 | Miscellaneous | +1.5 | +2.8 |
| Rubber tires | -1.2 | -10.4 | All industries | +3.8 | +3.9 |
| Paper and printing | +4 | +8 | | | |
| Chemicals and allied products | -4.6 | -4.2 | | | |
| Stone, clay, and glass | -3 | +10.0 | | | |
| Metal products other than iron and steel | +1.0 | +3.0 | | | |
| Tobacco products | +2.1 | +9 | | | |
| Machinery (not including transportation equipment) | -3.9 | -3.6 | | | |
| Musical instruments | +6.9 | +29.4 | | | |
| Transportation equipment | +54.6 | +83.2 | | | |
| Car building and repairing | -3 | +10.3 | | | |
| Miscellaneous | +16.3 | +22.2 | | | |
| All industries | +1.6 | +2.4 | | | |

PER CENT OF CHANGES IN EMPLOYMENT AND PAY ROLLS IN SPECIFIED STATES—
Continued

Monthly period—Continued

| State and industry group | Percent of change, August to September, 1928 | | State and industry group | Index numbers (1923-1925=100) | |
|---|--|----------|---|----------------------------------|------------------|
| | Employment | Pay roll | | September, 1928 | October, 1928 |
| New York | | | Pennsylvania | | |
| Stone, clay, and glass..... | +0.6 | +1.4 | Metal products..... | 88.9 | 88.9 |
| Metals and machinery..... | +1.3 | +3.0 | Transportation equipment..... | 68.6 | 66.1 |
| Wood manufactures..... | +5 | +3.6 | Textile products..... | 94.4 | 96.7 |
| Furs, leather, and rubber goods..... | +1.3 | +2.2 | Foods and tobacco..... | 99.2 | 102.1 |
| Chemicals, oils, paints, etc..... | -.4 | -.2 | Stone, clay, and glass products..... | 84.0 | 82.3 |
| Paper..... | +1 | -1.1 | Lumber products..... | 84.6 | 84.6 |
| Printing and paper goods..... | +1.7 | +3.8 | Chemical products..... | 97.9 | 98.0 |
| Textiles..... | +1.0 | +4.5 | Leather and rubber products..... | 98.8 | 97.4 |
| Clothing and millinery..... | +6.0 | +6.1 | Paper and printing..... | 93.4 | 94.4 |
| Food and tobacco..... | +6.9 | +5.4 | | | |
| Water, light, and power..... | -.7 | -1.1 | All industries..... | 89.3 | 89.5 |
| All industries..... | +2.2 | +3.4 | | | |
| September to October, 1928 | | | Employment | | |
| Oklahoma | | | Pay roll | | |
| Cottonseed-oil mills..... | +244.3 | +254.0 | Metal products..... | 90.2 | 97.4 |
| Food production: | | | Transportation equipment..... | 66.9 | 64.9 |
| Bakeries..... | +3.1 | +4.5 | Textile products..... | 99.8 | 107.0 |
| Confections..... | +8.5 | +7.2 | Foods and tobacco..... | 100.0 | 104.1 |
| Creameries and dairies..... | -.6 | +3.9 | Stone, clay, and glass products..... | 80.8 | 86.4 |
| Flour mills..... | +3.4 | +7 | Lumber products..... | 88.1 | 91.6 |
| Ice and ice cream..... | -13.4 | -17.9 | Chemical products..... | 103.9 | 106.3 |
| Meat and poultry..... | +1.9 | -4.8 | Leather and rubber products..... | 104.7 | 103.7 |
| Lead and zinc: | | | Paper and printing..... | 103.8 | 108.7 |
| Mines and mills..... | +56.0 | +52.9 | All industries..... | 90.2 | 95.2 |
| Smelters..... | +1.0 | -1.1 | | | |
| Metals and machinery: | | | Per cent of change, July to August, 1928 | | |
| Auto repairs, etc..... | +3.9 | +13.9 | Employment | Pay roll | |
| Machine shops and foundries..... | -.5 | -10.0 | | | |
| Tank construction and erection..... | -10.6 | -29.8 | | | |
| Oil industry: | | | Wisconsin | | |
| Producing and gasoline manufacture..... | -.6 | -11.6 | Manual | | |
| Refineries..... | -1.6 | -5.1 | Logging..... | +34.5 | +8.9 |
| Printing: Job work..... | +3.9 | +2.9 | Mining..... | -.3 | +13.0 |
| Public utilities: | | | Stone crushing and quarrying..... | +5.4 | +10.5 |
| Steam railway shops..... | +8 | +14.6 | Manufacturing: | | |
| Street railways..... | -.6 | +5.0 | Stone and allied industries..... | -4.2 | -3.6 |
| Water, light, and power..... | +3.6 | +4.1 | Metal..... | +4.8 | +16.7 |
| Stone, clay, and glass: | | | Wood..... | -1.5 | +3.3 |
| Brick and tile..... | +20.6 | -1.3 | Rubber..... | +8.0 | +19.5 |
| Cement and plaster..... | 0 | +1.6 | Leather..... | +6.3 | +15.3 |
| Crushed stone..... | +5.9 | +6.4 | Paper..... | +9 | +11.6 |
| Glass manufacture..... | +9.9 | +10.4 | Textiles..... | +2 | +13.9 |
| Textiles and cleaning: | | | Foods..... | -9.3 | -7.4 |
| Textile manufacture..... | +1 | -2.8 | Light and power..... | +1.8 | +8.6 |
| Laundries, etc..... | +15.8 | +4.9 | Printing and publishing..... | +1.4 | +1 |
| Woodworking: | | | Laundering, cleaning, and dyeing..... | +5 | -2.6 |
| Saw mills..... | -8.0 | -13.2 | Chemicals (including soap, glue, and explosives)..... | -3.0 | -.5 |
| Millwork, etc..... | -2.5 | -8.4 | All manufacturing..... | +1.2 | +10.1 |
| All industries..... | +3.7 | +3 | | | |

PER CENT OF CHANGES IN EMPLOYMENT AND PAY ROLLS IN SPECIFIED STATES—
Continued

Monthly period—Continued

| State and industry group | Per cent of change, July to August, 1928 | | State and industry group | Per cent of change, August to September, 1928 | |
|--|--|----------|--|---|----------|
| | Employment | Pay roll | | Employment | Pay roll |
| Wisconsin—Continued | | | Wisconsin—Continued | | |
| <i>Manual—Continued</i> | | | <i>Manual—Continued</i> | | |
| Construction: | | | Manufacturing—Continued. | | |
| Building..... | +1.0 | -2.8 | Leather..... | +0.1 | -3.7 |
| Highway..... | +2.8 | +6.1 | Paper..... | +3.2 | -2.0 |
| Railroad..... | -7.3 | -1.3 | Textiles..... | +6 | -1.6 |
| Marine dredging, sewer digging..... | +6.9 | +13.2 | Foods..... | -19.5 | -14.7 |
| Communication: | | | Light and power..... | -9 | -4.6 |
| Steam railways..... | +1.9 | +8.0 | Printing and publishing..... | +1.5 | +2.1 |
| Electric railways..... | +2.2 | +5.8 | Laundering, cleaning, and dyeing..... | -1 | +1.3 |
| Express, telephone, and telegraph..... | -3.8 | +2.4 | Chemical (including soap, glue, and explosives)..... | +1.0 | +4.1 |
| Wholesale trade..... | +3.7 | +8.6 | All manufacturing..... | -9 | -2.0 |
| Hotels and restaurants..... | +1.4 | ----- | Construction: | | |
| <i>Nonmanual</i> | | | Building..... | +1 | +2 |
| Manufacturing, mines, and quarries..... | +1.3 | +1.6 | Highway..... | -1.4 | -4.8 |
| Construction..... | +4.7 | +3.1 | Railroad..... | -5.4 | -6.5 |
| Communication..... | +3 | +4.2 | Marine dredging, sewer digging..... | -15.5 | -11.2 |
| Wholesale trade..... | +8 | +2 | Communication: | | |
| Retail trade—sales force only..... | -7 | -3.4 | Steam railways..... | +13.8 | +11.8 |
| Miscellaneous professional services..... | -4 | +10.3 | Electric railways..... | -3.6 | -3.7 |
| Hotels and restaurants..... | -3.3 | ----- | Express, telephone, and telegraph..... | +3 | -7 |
| <i>Manual</i> | | | Wholesale trade..... | +15.4 | +15.5 |
| Logging..... | +9 | -6.3 | Hotels and restaurants..... | -2.7 | ----- |
| Mining..... | +3.5 | -2.5 | <i>Nonmanual</i> | | |
| Stone crushing and quarrying..... | -2 | -10.4 | Manufacturing, mines, and quarries..... | +9 | -1.6 |
| Manufacturing: | | | Construction..... | -4.0 | -4.4 |
| Stone and allied industries..... | -2.4 | -8 | Communication..... | +1.0 | -9.1 |
| Metal..... | +1.4 | -7 | Wholesale trade..... | +1.1 | -1.8 |
| Wood..... | +1.2 | -2.0 | Retail trade—sales force only..... | +1.4 | +2.3 |
| Rubber..... | +2.5 | +3.2 | Miscellaneous professional services..... | -1.5 | -4.9 |
| | | | Hotels and restaurants..... | -1.1 | ----- |

Yearly period

| State and industry group | Per cent of change, September, 1927, to September, 1928 | | State and industry group | Per cent of change, September, 1927, to September, 1928 | |
|---|--|----------|--|---|----------|
| | Employment | Pay roll | | Employment | Pay roll |
| California | | | California—Continued | | |
| Stone, clay, and glass products..... | -5.3 | -7.3 | Clothing, millinery, and laundering..... | -1.6 | -0.5 |
| Metals, machinery, and conveyances..... | +6.8 | +9.1 | Foods, beverages, and tobacco..... | -3.9 | -6.6 |
| Wood manufactures..... | -1.4 | -2.4 | Water, light, and power..... | +17.8 | +25.4 |
| Leather and rubber goods..... | +21.6 | +16.3 | Miscellaneous..... | -2.3 | -7.7 |
| Chemicals, oils, paints, etc..... | +12.2 | +14.6 | All industries..... | +1.8 | +2.6 |
| Printing and paper goods..... | -1.3 | +5 | | | |
| Textiles..... | -12.5 | -13.7 | | | |

PER CENT OF CHANGES IN EMPLOYMENT AND PAY ROLLS IN SPECIFIED STATES—
Continued

Yearly period—Continued

| State and industry group | Per cent of change, September, 1927, to September, 1928 | | State and industry group | Index numbers (1923-1925=100) | |
|---|---|----------|---|----------------------------------|------------------|
| | Employment | Pay roll | | October, 1927 | October, 1928 |
| New York | | | Employment | | |
| Stone, clay, and glass..... | -3.9 | -5.1 | Pennsylvania | | |
| Metals and machinery..... | -2.1 | +1.1 | Metal products..... | 82.2 | 88.9 |
| Wood manufactures..... | -9.7 | -10.6 | Transportation equipment..... | 83.4 | 66.1 |
| Furs, leather, and rubber goods..... | -4.9 | -6.4 | Textile products..... | 99.4 | 96.7 |
| Chemicals, oils, paints, etc..... | -5.4 | -4.9 | Foods and tobacco..... | 100.5 | 102.1 |
| Paper..... | +1.0 | +1.4 | Stone, clay, and glass products..... | 94.5 | 82.3 |
| Printing and paper goods..... | -3.0 | -4.4 | Lumber products..... | 89.7 | 84.6 |
| Textiles..... | -6.9 | -9.0 | Chemical products..... | 93.9 | 98.0 |
| Clothing and millinery..... | -4.2 | -6.6 | Leather and rubber products..... | 99.6 | 97.4 |
| Food and tobacco..... | -6.6 | -1.1 | Paper and printing..... | 96.3 | 94.4 |
| Water, light, and power..... | -7.5 | -9.1 | Pay roll | | |
| All industries..... | -3.7 | -3.2 | All industries..... | 89.2 | 89.5 |
| Oklahoma | | | Percent of change, August, 1927, to August, 1928 | | |
| Cottonseed-oil mills..... | -12.2 | -18.4 | Employment | | |
| Food production: | | | Metal products..... | 78.8 | 97.4 |
| Bakeries..... | +22.8 | +22.9 | Transportation equipment..... | 84.4 | 64.9 |
| Confections..... | -7.4 | -4.4 | Textile products..... | 110.4 | 107.0 |
| Creameries and dairies..... | -16.1 | -24.3 | Foods and tobacco..... | 101.6 | 104.1 |
| Flour mills..... | +33.8 | +32.0 | Stone, clay, and glass products..... | 95.3 | 86.4 |
| Ice and ice cream..... | -7.0 | +1.0 | Lumber products..... | 94.0 | 91.6 |
| Meat and poultry..... | +6.0 | +15.6 | Chemical products..... | 104.0 | 106.3 |
| Lead and zinc: | | | Leather and rubber products..... | 106.6 | 103.7 |
| Mines and mills..... | -12.4 | -21.6 | Paper and printing..... | 104.8 | 108.7 |
| Smelters..... | +1.4 | -14.8 | All industries..... | 90.2 | 95.2 |
| Metals and machinery: | | | Percent of change, August, 1927, to August, 1928 | | |
| Auto repairs, etc..... | +225.1 | +214.4 | Employment | | |
| Machine shops and foundries..... | -6.6 | -3.8 | Pay roll | | |
| Tank construction and erection..... | +11.9 | +10.7 | Wisconsin | | |
| Oil industry: | | | Manual | | |
| Producing and gasoline manufacture..... | +14.4 | +16.4 | Logging..... | +3.8 | +6.8 |
| Refineries..... | +14.5 | +22.9 | Mining..... | -47.5 | -44.6 |
| Printing: Job work..... | +89.2 | +120.1 | Stone crushing and quarrying..... | -2.1 | -1.9 |
| Public utilities: | | | Manufacturing: | | |
| Steam-railway shops..... | -9.0 | +5.5 | Stone and allied industries..... | -10.0 | -11.1 |
| Street railways..... | +21.3 | +12.9 | Metal..... | +5.1 | +10.7 |
| Water, light, and power..... | +104.8 | +147.8 | Wood..... | -5.9 | -9.1 |
| Stone, clay, and glass: | | | Rubber..... | +2.7 | -1.2 |
| Brick and tile..... | -28.5 | -7.1 | Leather..... | -8.8 | -3.2 |
| Cement and plaster..... | -2.8 | -5.7 | Paper..... | -4.7 | +8.8 |
| Crushed stone..... | -5.6 | +3.6 | Textiles..... | -13.8 | -13.2 |
| Glass manufacture..... | +15.6 | +14.0 | Foods..... | -1.5 | -2.6 |
| Textiles and cleaning: | | | Light and power..... | +6.1 | +9.6 |
| Textile manufacture..... | +40.6 | +14.2 | Printing and publishing..... | -8.8 | -2.6 |
| Laundries, etc..... | +31.7 | +12.8 | Laundering, cleaning, and dyeing..... | +1.4 | +1.4 |
| Woodworking: | | | Chemical (including soap, glue, and explosives)..... | -11.8 | -15.1 |
| Sawmills..... | +193.0 | +274.8 | All manufacturing..... | -8.8 | +1.7 |
| Millwork, etc..... | +22.4 | +32.0 | | | |
| All industries..... | +15.6 | +17.2 | | | |

Continued

Yearly period—Continued

| State and industry group | Per cent of change, August, 1927, to August, 1928 | | State and industry group | Per cent of change, September, 1927, to September, 1928 | |
|---|---|----------|---|---|-------------|
| | Employment | Pay roll | | Employment | Pay roll |
| Wisconsin—Continued | | | Wisconsin—Continued | | |
| <i>Manual—Continued</i> | | | <i>Manual—Continued</i> | | |
| Construction: | | | Manufacturing—Continued. | | |
| Building..... | -17.5 | -20.6 | Rubber..... | +3.2 | +5.7 |
| Highway..... | -3.7 | -1.0 | Leather..... | +6 | -2.0 |
| Railroad..... | +26.3 | +29.5 | Paper..... | -2.6 | -1.6 |
| Marine dredging, sewer digging..... | -7.3 | -15.8 | Textiles..... | -14.2 | -17.5 |
| Communication: | | | Foods..... | -7.4 | -9.3 |
| Steam railways..... | -8.3 | +5.7 | Light and power..... | +6.0 | +4.7 |
| Electric railways..... | -14.5 | -8.5 | Printing and publishing..... | +1.9 | +3 |
| Express, telephone, and telegraph..... | +4.7 | +14.3 | Laundering, cleaning, and dyeing..... | +1.5 | +1.2 |
| Wholesale trade..... | +3.1 | -2.8 | Chemical (including soap, glue, and explosives)..... | -12.9 | -11.5 |
| Hotels and restaurants..... | +2.4 | ----- | All manufacturing..... | +1.1 | +4.7 |
| <i>Nonmanual</i> | | | Construction: | | |
| Manufacturing, mines, and quarries..... | -7 | +2.3 | Building..... | -18.2 | -15.0 |
| Construction..... | -5 | +1.3 | Highway..... | -6.5 | -13.0 |
| Communication..... | +3.6 | +3.4 | Railroad..... | +9.4 | +9.1 |
| Wholesale trade..... | +9.4 | +6.0 | Marine dredging, sewer digging..... | +4.0 | -8.9 |
| Retail trade—sales force only..... | -2.6 | -22.1 | Communication: | | |
| Miscellaneous professional services..... | -2 | +5.3 | Steam railways..... | -5.7 | +2.5 |
| Hotels and restaurants..... | -15.1 | ----- | Electric railways..... | -4.6 | -3.8 |
| | | | Express, telephone, and telegraph..... | +4.6 | +12.9 |
| | | | Wholesale trade..... | +20.5 | +17.5 |
| | | | Hotels and restaurants..... | +3.7 | ----- |
| | | | <i>Nonmanual</i> | | |
| <i>Manual</i> | | | Manufacturing, mines and quarries..... | +4 | +1.7 |
| Logging..... | -14.7 | -16.4 | Construction..... | -5.4 | -5.3 |
| Mining..... | -46.6 | -46.8 | Communication..... | +4.1 | -8.9 |
| Stone crushing and quarrying..... | -19.4 | -33.7 | Wholesale trade..... | +11.3 | +7.6 |
| Manufacturing: | | | Retail trade—sales force only..... | -10.9 | -5.7 |
| Stone and allied industries..... | -14.2 | -9.5 | Miscellaneous professional services..... | +5.1 | +5.3 |
| Metal..... | +9.0 | +18.2 | Hotels and restaurants..... | -13.2 | ----- |
| Wood..... | -1.5 | -5.0 | | | |

WHOLESALE AND RETAIL PRICES

Retail Prices of Food in the United States

THE following tables are compiled from monthly reports of actual selling prices¹ received by the Bureau of Labor Statistics from retail dealers.

Table 1 shows for the United States retail prices of food October 15, 1927, and September 15 and October 15, 1928, as well as the percentage changes in the year and in the month. For example, the retail price per pound of leg of lamb was 38.2 cents on October 15, 1927; 40.3 cents on September 15, 1928; and 38.8 cents on October 15, 1928. These figures show an increase of 2 per cent in the year and a decrease of 4 per cent in the month.

The cost of various articles of food combined shows an increase of 0.4 per cent October 15, 1928, as compared with October 15, 1927, and a decrease of 0.4 per cent October 15, 1928, as compared with September 15, 1928.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE OCTOBER 15, 1928, COMPARED WITH SEPTEMBER 15, 1928, AND OCTOBER 15, 1927

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers]

| Article | Unit | Average retail price on— | | | Per cent of increase (+) or decrease (−) Oct. 15, 1928, compared with— | |
|---|-----------------|--------------------------|----------------|---------------|--|----------------|
| | | Oct. 15, 1927 | Sept. 15, 1928 | Oct. 15, 1928 | Oct. 15, 1927 | Sept. 15, 1928 |
| | | Cents | Cents | Cents | | |
| Sirloin steak..... | Pound..... | 43.7 | 51.8 | 50.3 | +15 | −3 |
| Round steak..... | do..... | 37.9 | 45.8 | 44.6 | +18 | −3 |
| Rib roast..... | do..... | 31.9 | 37.4 | 36.8 | +15 | −2 |
| Chuck roast..... | do..... | 24.3 | 30.4 | 30.2 | +24 | −1 |
| Plate beef..... | do..... | 15.8 | 20.6 | 20.8 | +32 | +1 |
| Pork chops..... | do..... | 41.5 | 44.3 | 37.6 | −9 | −15 |
| Bacon..... | do..... | 46.6 | 45.4 | 45.3 | −3 | −0.2 |
| Ham..... | do..... | 53.6 | 56.0 | 55.6 | +4 | −1 |
| Lamb, leg of..... | do..... | 38.2 | 40.3 | 38.8 | +2 | −4 |
| Ham..... | do..... | 35.7 | 37.9 | 37.9 | +6 | 0 |
| Salmon, canned, red..... | do..... | 34.4 | 33.3 | 32.6 | −5 | −2 |
| Milk, fresh..... | Quart..... | 14.2 | 14.2 | 14.2 | 0 | 0 |
| Milk, evaporated..... | 16-oz. can..... | 11.5 | 11.3 | 11.3 | −2 | 0 |
| Butter..... | Pound..... | 55.7 | 57.6 | 57.5 | +3 | −0.2 |
| Oleomargarine (all butter substitutes)..... | do..... | 27.9 | 27.4 | 27.6 | −1 | +1 |
| Cheese..... | do..... | 38.3 | 38.7 | 38.8 | +1 | +0.3 |
| Lard..... | do..... | 19.6 | 19.3 | 19.5 | −1 | +1 |
| Vegetable lard substitute..... | do..... | 25.2 | 24.9 | 24.9 | −1 | 0 |
| Eggs, strictly fresh..... | Dozen..... | 56.6 | 50.4 | 54.2 | −4 | +8 |
| Eggs, storage..... | do..... | 42.1 | | 43.8 | +4 | |

¹ In addition to monthly retail prices of food and coal, the bureau publishes the prices of gas and electricity from each of 51 cities for the dates for which these data are secured.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE OCTOBER 15, 1928, COMPARED WITH SEPTEMBER 15, 1928, AND OCTOBER 15, 1927—Continued

| Article | Unit | Average retail price on— | | | Per cent of increase (+) or decrease (–) Oct. 15, 1928, compared with— | |
|--------------------------|---------------------|--------------------------|----------------|---------------|--|----------------|
| | | Oct. 15, 1927 | Sept. 15, 1928 | Oct. 15, 1928 | Oct. 15, 1927 | Sept. 15, 1928 |
| | | <i>Cents</i> | <i>Cents</i> | <i>Cents</i> | | |
| Bread..... | Pound..... | 9.3 | 9.1 | 9.1 | –2 | 0 |
| Flour..... | do..... | 5.5 | 5.3 | 5.2 | –5 | –2 |
| Corn meal..... | do..... | 5.2 | 5.3 | 5.3 | +2 | 0 |
| Rolled oats..... | do..... | 9.0 | 9.0 | 8.9 | –1 | –1 |
| Corn flakes..... | 6-oz. package..... | 9.7 | 9.5 | 9.5 | –2 | 0 |
| Wheat cereal..... | 28-oz. package..... | 25.5 | 25.6 | 25.6 | +0.4 | 0 |
| Macaroni..... | Pound..... | 20.1 | 19.8 | 19.7 | –2 | –1 |
| Rice..... | do..... | 10.5 | 10.0 | 9.9 | –6 | –1 |
| Beans, navy..... | do..... | 9.6 | 12.7 | 12.5 | +30 | –2 |
| Potatoes..... | do..... | 3.0 | 2.2 | 2.2 | –27 | 0 |
| Onions..... | do..... | 5.0 | 5.8 | 6.1 | +22 | +5 |
| Cabbage..... | do..... | 3.9 | 4.2 | 4.3 | +10 | +2 |
| Beans, baked..... | No. 2 can..... | 11.5 | 11.6 | 11.6 | +1 | 0 |
| Corn, canned..... | do..... | 15.7 | 15.9 | 15.8 | +1 | –1 |
| Peas, canned..... | do..... | 16.7 | 16.8 | 16.7 | 0 | –1 |
| Tomatoes, canned..... | do..... | 11.9 | 11.6 | 11.8 | –1 | +2 |
| Sugar..... | Pound..... | 7.2 | 7.0 | 6.9 | –4 | –1 |
| Tea..... | do..... | 77.5 | 77.4 | 77.3 | –0.3 | –0.1 |
| Coffee..... | do..... | 47.4 | 49.5 | 49.6 | +5 | +0.2 |
| Prunes..... | do..... | 14.6 | 13.8 | 13.8 | –5 | 0 |
| Raisins..... | do..... | 14.2 | 13.0 | 12.4 | –13 | –5 |
| Bananas..... | Dozen..... | 33.9 | 32.7 | 33.1 | –2 | +1 |
| Oranges..... | do..... | 57.8 | 66.1 | 64.3 | +11 | –3 |
| Weighted food index..... | | | | | +0.4 | –0.4 |

Table 2 shows for the United States average retail prices of specified food articles on October 15, 1913, and on October 15 of each year from 1922 to 1928, together with percentage changes in October of each of these specified years, compared with October, 1913. For example, the retail price per pound of chuck roast was 16.4 cents in October, 1913; 19.9 cents in October, 1922; 20.8 cents in October, 1923; 20.7 cents in October, 1924; 22.0 cents in October, 1925; 22.8 cents in October, 1926; 24.3 cents in October, 1927; and 30.2 cents in October, 1928.

As compared with October, 1913, these figures show increases of 21 per cent in October, 1922; 27 per cent in October, 1923; 26 per cent in October, 1924; 34 per cent in October, 1925; 39 per cent in October, 1926; 48 per cent in October, 1927; and 84 per cent in October, 1928.

The cost of the various articles of food combined showed an increase of 51 per cent in October, 1928, as compared with October, 1913.

TABLE 2.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OCTOBER 15 OF CERTAIN SPECIFIED YEARS COMPARED WITH OCTOBER 15, 1913

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers]

| Article | Average retail price on Oct. 15— | | | | | | | | Per cent of increase Oct. 15 of each specified year compared with Oct. 15, 1913 | | | | | | | |
|--|----------------------------------|------|------|------|------|------|------|------|---|------|------|------|------|------|------|--|
| | 1913 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | |
| | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | Cts. | | | | | | | | |
| Sirloin steak.....pound..... | 25.7 | 38.3 | 40.1 | 39.6 | 41.2 | 41.5 | 43.7 | 50.3 | 49 | 56 | 54 | 60 | 61 | 70 | 96 | |
| Round steak.....do..... | 23.1 | 33.1 | 34.4 | 33.7 | 35.4 | 36.0 | 37.9 | 44.6 | 43 | 49 | 46 | 53 | 56 | 64 | 93 | |
| Rib roast.....do..... | 20.0 | 28.0 | 28.9 | 28.6 | 30.0 | 30.6 | 31.9 | 36.8 | 40 | 45 | 43 | 50 | 53 | 60 | 84 | |
| Chuck roast.....do..... | 16.4 | 19.9 | 20.8 | 20.7 | 22.0 | 22.8 | 24.3 | 30.2 | 21 | 27 | 26 | 34 | 39 | 48 | 84 | |
| Plate beef.....do..... | 12.3 | 12.8 | 13.1 | 13.1 | 14.1 | 14.6 | 15.8 | 20.8 | 4 | 7 | 7 | 15 | 19 | 28 | 69 | |
| Pork chops.....do..... | 22.6 | 36.6 | 34.2 | 37.5 | 39.1 | 42.6 | 41.5 | 37.6 | 62 | 51 | 66 | 73 | 88 | 84 | 66 | |
| Bacon.....do..... | 27.8 | 40.8 | 39.3 | 40.1 | 49.6 | 51.7 | 46.6 | 45.3 | 47 | 41 | 44 | 78 | 86 | 68 | 63 | |
| Ham.....do..... | 27.6 | 47.6 | 46.4 | 47.1 | 54.3 | 59.8 | 53.6 | 55.6 | 72 | 68 | 71 | 97 | 117 | 94 | 101 | |
| Lamb, leg of.....do..... | 18.4 | 35.9 | 36.5 | 35.9 | 38.4 | 38.3 | 38.2 | 38.8 | 95 | 98 | 95 | 109 | 108 | 108 | 111 | |
| Hens.....do..... | 21.2 | 34.8 | 34.8 | 35.1 | 36.5 | 37.6 | 35.7 | 37.9 | 64 | 64 | 66 | 72 | 77 | 68 | 79 | |
| Salmon, canned, red | | | | | | | | | | | | | | | | |
|pound..... | | 31.6 | 31.4 | 31.5 | 35.5 | 35.6 | 34.4 | 32.6 | | | | | | | | |
| Milk, fresh.....quart..... | 9.0 | 13.3 | 14.1 | 13.9 | 14.3 | 14.0 | 14.2 | 14.2 | 48 | 57 | 54 | 59 | 56 | 58 | 58 | |
| Milk, evaporated | | | | | | | | | | | | | | | | |
|16-oz. can..... | | 11.2 | 12.2 | 11.0 | 11.5 | 11.4 | 11.5 | 11.3 | | | | | | | | |
| Butter.....pound..... | 38.2 | 50.8 | 56.2 | 47.9 | 59.4 | 54.3 | 55.7 | 57.5 | 33 | 47 | 25 | 55 | 42 | 46 | 51 | |
| Oleomargarine (all butter substitutes) | | | | | | | | | | | | | | | | |
|pound..... | | 27.4 | 28.7 | 30.0 | 30.9 | 30.3 | 27.9 | 27.6 | | | | | | | | |
| Cheese.....do..... | 22.4 | 34.1 | 38.5 | 34.8 | 37.2 | 36.7 | 38.3 | 38.8 | 52 | 72 | 55 | 66 | 64 | 71 | 73 | |
| Lard.....do..... | 16.0 | 17.5 | 18.6 | 21.4 | 24.1 | 21.9 | 19.6 | 19.5 | 9 | 16 | 34 | 51 | 37 | 23 | 22 | |
| Vegetable lard substitute.....pound..... | | 23.2 | 23.5 | 25.5 | 25.9 | 25.7 | 25.2 | 24.9 | | | | | | | | |
| Eggs, strictly fresh.....dozen..... | 41.6 | 54.3 | 54.6 | 59.7 | 60.3 | 58.2 | 56.6 | 54.2 | 31 | 31 | 44 | 45 | 40 | 36 | 30 | |
| Eggs, storage.....do..... | | 39.1 | 41.7 | 44.1 | 46.0 | 45.9 | 42.1 | 43.8 | | | | | | | | |
| Bread.....pound..... | 5.6 | 8.7 | 8.7 | 8.8 | 9.4 | 9.4 | 9.3 | 9.1 | 55 | 55 | 57 | 68 | 68 | 66 | 63 | |
| Flour.....do..... | 3.3 | 4.8 | 4.6 | 5.3 | 5.9 | 5.7 | 5.5 | 5.2 | 45 | 39 | 61 | 79 | 73 | 67 | 58 | |
| Corn meal.....do..... | 3.1 | 3.9 | 4.3 | 5.0 | 5.3 | 5.1 | 5.2 | 5.3 | 26 | 39 | 61 | 71 | 65 | 68 | 71 | |
| Rollod oats.....do..... | | 8.7 | 8.8 | 8.9 | 9.2 | 9.1 | 9.0 | 8.9 | | | | | | | | |
| Corn flakes | | | | | | | | | | | | | | | | |
|8-oz. package..... | | 9.7 | 9.7 | 10.5 | 11.0 | 10.9 | 9.7 | 9.5 | | | | | | | | |
| Wheat cereal | | | | | | | | | | | | | | | | |
|28-oz. package..... | | 25.6 | 24.4 | 24.4 | 25.1 | 25.4 | 25.5 | 25.6 | | | | | | | | |
| Macaroni.....pound..... | | 19.9 | 19.7 | 19.5 | 20.5 | 20.1 | 20.1 | 19.7 | | | | | | | | |
| Rice.....do..... | 8.7 | 9.6 | 9.6 | 10.4 | 11.3 | 11.6 | 10.5 | 9.9 | 10 | 10 | 20 | 30 | 33 | 21 | 14 | |
| Beans, navy.....do..... | | 10.1 | 10.6 | 10.1 | 10.0 | 9.1 | 9.6 | 12.5 | | | | | | | | |
| Potatoes.....do..... | 1.8 | 2.2 | 2.9 | 2.4 | 3.7 | 3.8 | 3.0 | 2.2 | 22 | 61 | 33 | 106 | 111 | 67 | 22 | |
| Onions.....do..... | | 4.4 | 6.3 | 5.2 | 5.8 | 5.0 | 5.0 | 6.1 | | | | | | | | |
| Cabbage.....do..... | | 3.5 | 4.2 | 3.9 | 4.2 | 4.0 | 3.9 | 4.3 | | | | | | | | |
| Beans, baked | | | | | | | | | | | | | | | | |
|No. 2 can..... | | 13.2 | 12.9 | 12.6 | 12.3 | 11.7 | 11.5 | 11.6 | | | | | | | | |
| Corn, canned.....do..... | | 15.3 | 15.5 | 16.3 | 17.4 | 16.3 | 15.7 | 15.8 | | | | | | | | |
| Peas, canned.....do..... | | 17.4 | 17.6 | 18.2 | 18.2 | 17.4 | 16.7 | 16.7 | | | | | | | | |
| Tomatoes, canned | | | | | | | | | | | | | | | | |
|No. 2 can..... | | 12.7 | 12.9 | 13.5 | 13.1 | 12.1 | 11.9 | 11.8 | | | | | | | | |
| Sugar, granulated | | | | | | | | | | | | | | | | |
|pound..... | 5.5 | 7.9 | 10.6 | 8.8 | 6.8 | 7.1 | 7.2 | 6.9 | 44 | 93 | 60 | 24 | 29 | 31 | 25 | |
| Tea.....do..... | 54.5 | 68.2 | 70.0 | 71.8 | 75.8 | 77.3 | 77.5 | 77.3 | 25 | 28 | 32 | 39 | 42 | 42 | 42 | |
| Coffee.....do..... | 29.7 | 36.3 | 37.8 | 46.1 | 51.1 | 50.9 | 47.4 | 49.6 | 22 | 27 | 55 | 72 | 71 | 60 | 67 | |
| Prunes.....do..... | | 20.6 | 18.3 | 17.3 | 17.2 | 16.9 | 14.6 | 13.8 | | | | | | | | |
| Raisins.....do..... | | 20.7 | 16.8 | 15.0 | 14.3 | 14.8 | 14.2 | 12.4 | | | | | | | | |
| Bananas.....dozen..... | | 35.6 | 38.3 | 36.1 | 35.1 | 34.9 | 33.9 | 33.1 | | | | | | | | |
| Oranges.....do..... | | 61.1 | 51.1 | 50.6 | 64.6 | 56.0 | 57.8 | 64.3 | | | | | | | | |
| All articles combined 1. | | | | | | | | | 37.2 | 44.2 | 43.2 | 55.5 | 54.1 | 50.3 | 51.0 | |

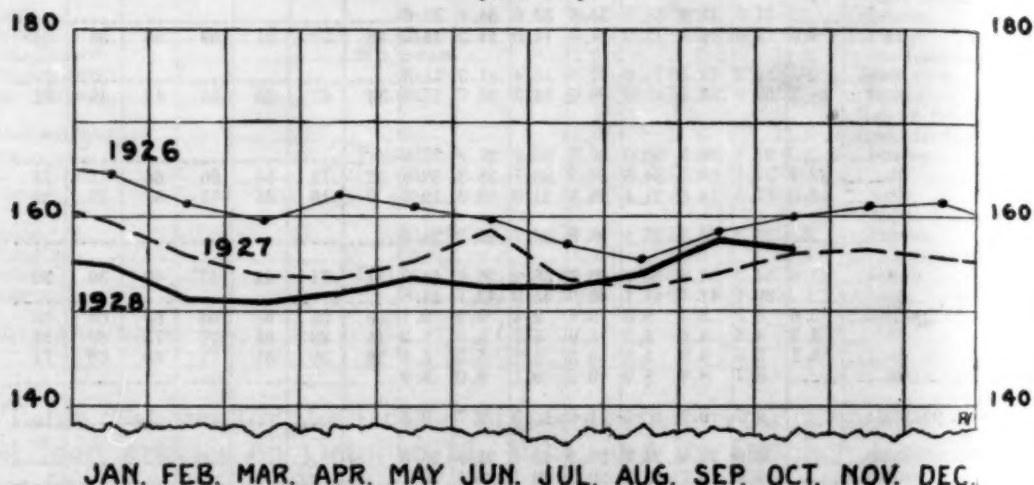
¹ Beginning with January, 1921, index numbers showing the trend in the retail cost of food have been composed of the articles shown in Tables 1 and 2, weighted according to the consumption of the average family. From January, 1913, to December, 1920, the index numbers included the following articles: Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, lard, hens, flour, corn meal, eggs, butter, milk, bread, potatoes, sugar, cheese, rice, coffee, and tea.

Index Numbers of Retail Prices of Food in the United States

IN TABLE 3 index numbers are given which show the changes in the retail prices of specified food articles, by years, for 1913 and 1920 to 1927,² and by months for 1927, and for January through October, 1928. These index numbers, or relative prices, are based on the year 1913 as 100 and are computed by dividing the average price of each commodity for each month and each year by the average price of that commodity for 1913. These figures must be used with caution. For example, the relative price of sirloin steak for the year 1926 was 162.6, which means that the average money price for the year 1926 was 62.6 per cent higher than the average money price for the year 1913. As compared with the relative price, 159.8 in 1925, the figures for 1926 show an increase of nearly three points, but an increase of 1.75 per cent in the year.

TREND OF RETAIL PRICES OF FOOD

[1913=100]



In the last column of Table 3 are given index numbers showing changes in the retail cost of all articles of food combined. Since January, 1921, these index numbers have been computed from the average prices of the articles of food shown in Tables 1 and 2, weighted according to the average family consumption in 1918. (See March, 1921, issue, p. 25.) Although previous to January, 1921, the number of food articles has varied, these index numbers have been so computed as to be strictly comparable for the entire period. The index numbers based on the average for the year 1913 as 100 are 157.8 for September, 1928, and 156.8 for October, 1928.

The curve shown in the chart on this page pictures more readily to the eye the changes in the cost of the food budget than do the index numbers given in the table.

²For index numbers of each month, January, 1913, to December, 1926, see Bulletin No. 396, pp. 44 to 61; Bulletin No. 418, pp. 38 to 51; and Bulletin No. 445, pp. 36 to 49.

RETAIL PRICES OF FOOD

219

TABLE 3.—INDEX NUMBERS OF RETAIL PRICES OF PRINCIPAL ARTICLES OF FOOD BY YEARS, 1913, 1920 TO 1927, AND BY MONTHS FOR 1927 AND JANUARY THROUGH OCTOBER, 1928

[Average for year 1913=100.0]

| Year and month | Sirloin steak | Round steak | Rib roast | Chuck roast | Plate beef | Pork chops | Bacon | Ham | Hens | Milk | Butter | Cheese |
|----------------|------------------|----------------|--------------|----------------|---------------|---------------|-------|-------|-------|-------|--------|--------|
| 1913 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1920 | 172.1 | 177.1 | 167.7 | 163.8 | 151.2 | 201.4 | 193.7 | 206.3 | 209.9 | 187.6 | 183.0 | 188.2 |
| 1921 | 152.8 | 154.3 | 147.0 | 132.5 | 118.2 | 166.2 | 158.2 | 181.4 | 186.4 | 164.0 | 135.0 | 153.9 |
| 1922 | 147.2 | 144.8 | 139.4 | 123.1 | 105.8 | 157.1 | 147.4 | 181.4 | 169.0 | 147.2 | 125.1 | 148.9 |
| 1923 | 153.9 | 150.2 | 143.4 | 126.3 | 106.6 | 144.8 | 144.8 | 169.1 | 164.3 | 155.1 | 144.7 | 167.0 |
| 1924 | 155.9 | 151.6 | 145.5 | 130.0 | 109.1 | 146.7 | 139.6 | 168.4 | 165.7 | 155.1 | 135.0 | 159.7 |
| 1925 | 159.8 | 155.6 | 149.5 | 135.0 | 114.1 | 174.3 | 173.0 | 195.5 | 171.8 | 157.3 | 143.1 | 166.1 |
| 1926 | 162.6 | 159.6 | 153.0 | 140.6 | 120.7 | 188.1 | 186.3 | 213.4 | 182.2 | 157.3 | 138.6 | 165.6 |
| 1927 | 167.7 | 166.4 | 158.1 | 148.1 | 127.3 | 175.2 | 174.8 | 204.5 | 173.2 | 158.4 | 145.2 | 170.1 |
| 1927: January | 160.6 | 158.3 | 153.0 | 141.9 | 124.0 | 174.3 | 181.1 | 211.2 | 180.8 | 158.4 | 152.5 | 170.1 |
| February | 161.0 | 158.7 | 153.5 | 141.9 | 123.1 | 171.0 | 179.6 | 210.8 | 180.8 | 158.4 | 153.5 | 170.1 |
| March | 161.8 | 159.6 | 153.5 | 142.5 | 123.1 | 174.3 | 179.3 | 210.0 | 181.7 | 158.4 | 154.6 | 168.8 |
| April | 164.6 | 163.2 | 156.1 | 145.6 | 125.6 | 175.7 | 178.2 | 210.8 | 182.6 | 157.3 | 152.5 | 167.9 |
| May | 166.5 | 165.5 | 157.6 | 146.9 | 125.6 | 173.3 | 176.3 | 209.3 | 180.3 | 156.2 | 139.4 | 167.4 |
| June | 166.9 | 165.9 | 157.1 | 146.9 | 125.6 | 165.2 | 174.4 | 206.3 | 170.4 | 156.2 | 135.2 | 167.4 |
| July | 171.7 | 170.0 | 160.1 | 149.4 | 126.4 | 166.2 | 172.6 | 203.0 | 167.1 | 157.3 | 134.2 | 167.0 |
| August | 172.0 | 170.9 | 160.1 | 149.4 | 126.4 | 179.5 | 172.2 | 201.9 | 166.2 | 158.4 | 134.2 | 167.4 |
| September | 172.4 | 170.9 | 160.6 | 150.0 | 128.1 | 193.8 | 172.2 | 200.0 | 166.2 | 158.4 | 139.4 | 170.6 |
| October | 172.0 | 170.0 | 161.1 | 151.9 | 130.6 | 197.6 | 172.6 | 199.3 | 167.6 | 159.6 | 145.4 | 173.3 |
| November | 171.3 | 169.5 | 161.1 | 153.1 | 133.9 | 172.9 | 171.5 | 197.0 | 167.1 | 159.6 | 147.3 | 174.7 |
| December | 172.8 | 171.3 | 163.6 | 156.9 | 138.0 | 156.2 | 167.8 | 192.9 | 167.6 | 160.7 | 152.5 | 176.5 |
| 1928: January | 174.8 | 173.1 | 165.2 | 158.8 | 142.1 | 149.0 | 165.2 | 192.2 | 172.8 | 160.7 | 150.9 | 177.4 |
| February | 176.4 | 174.4 | 167.2 | 160.6 | 144.6 | 140.5 | 161.9 | 190.3 | 174.6 | 160.7 | 147.0 | 177.4 |
| March | 176.8 | 175.3 | 167.2 | 161.3 | 146.3 | 136.2 | 159.3 | 187.7 | 174.6 | 159.6 | 149.6 | 174.2 |
| April | 178.3 | 177.6 | 168.7 | 163.1 | 147.9 | 149.0 | 158.9 | 188.1 | 177.0 | 158.4 | 143.9 | 172.9 |
| May | 181.5 | 181.2 | 172.2 | 166.3 | 150.4 | 168.6 | 159.6 | 190.3 | 177.0 | 158.4 | 142.6 | 172.4 |
| June | 186.6 | 186.5 | 175.3 | 172.5 | 152.9 | 165.7 | 160.0 | 192.2 | 174.2 | 157.3 | 140.7 | 172.4 |
| July | 195.7 | 196.9 | 181.8 | 180.6 | 157.9 | 177.6 | 162.6 | 198.5 | 172.3 | 158.4 | 141.8 | 173.3 |
| August | 200.8 | 202.2 | 184.8 | 185.0 | 162.0 | 190.0 | 165.9 | 204.5 | 172.8 | 158.4 | 144.7 | 173.8 |
| September | 203.9 | 205.4 | 188.9 | 190.0 | 170.2 | 211.0 | 168.1 | 208.2 | 177.9 | 159.6 | 150.4 | 175.1 |
| October | 198.0 | 200.0 | 185.9 | 188.8 | 171.9 | 179.0 | 167.8 | 206.7 | 177.9 | 159.6 | 150.1 | 175.6 |

| Year and month | Lard | Eggs | Bread | Flour | Corn meal | Rice | Pota- toes | Sugar | Tea | Coffee | All arti- cles ¹ |
|----------------|-------|-------|-------|-------|--------------|-------|---------------|-------|-------|--------|-----------------------------------|
| 1913 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1920 | 186.7 | 197.4 | 205.4 | 245.5 | 216.7 | 200.0 | 370.6 | 352.7 | 134.7 | 157.7 | 203.4 |
| 1921 | 113.9 | 147.5 | 176.8 | 175.8 | 150.0 | 109.2 | 182.4 | 145.5 | 128.1 | 121.8 | 153.3 |
| 1922 | 107.6 | 128.7 | 155.4 | 154.5 | 130.0 | 109.2 | 164.7 | 132.7 | 125.2 | 121.1 | 141.6 |
| 1923 | 112.0 | 134.8 | 155.4 | 142.4 | 136.7 | 109.2 | 170.6 | 183.6 | 127.8 | 126.5 | 146.2 |
| 1924 | 120.3 | 138.6 | 157.1 | 148.5 | 156.7 | 116.1 | 158.8 | 167.3 | 131.4 | 145.3 | 145.9 |
| 1925 | 147.5 | 151.0 | 167.9 | 184.8 | 180.0 | 127.6 | 211.8 | 130.9 | 138.8 | 172.8 | 157.4 |
| 1926 | 138.6 | 140.6 | 167.9 | 181.8 | 170.0 | 133.3 | 288.2 | 125.5 | 141.0 | 171.1 | 160.6 |
| 1927 | 122.2 | 131.0 | 166.1 | 166.7 | 173.3 | 123.0 | 223.5 | 132.7 | 142.5 | 162.1 | 155.4 |
| 1927: January | 126.6 | 162.0 | 167.9 | 169.7 | 170.0 | 126.4 | 235.3 | 136.4 | 142.5 | 168.5 | 159.3 |
| February | 124.1 | 128.1 | 167.9 | 169.7 | 170.0 | 124.1 | 223.5 | 136.4 | 142.3 | 167.4 | 156.0 |
| March | 122.8 | 102.6 | 167.9 | 166.7 | 170.0 | 124.1 | 217.6 | 134.5 | 142.6 | 165.4 | 153.8 |
| April | 120.9 | 98.3 | 167.9 | 166.7 | 170.0 | 123.0 | 217.6 | 132.7 | 142.6 | 163.8 | 153.6 |
| May | 120.3 | 97.4 | 167.9 | 166.7 | 170.0 | 121.8 | 264.7 | 132.7 | 142.3 | 161.7 | 155.4 |
| June | 119.0 | 97.1 | 166.1 | 166.7 | 173.3 | 123.0 | 352.9 | 132.7 | 142.1 | 160.7 | 158.5 |
| July | 119.0 | 107.0 | 166.1 | 166.7 | 173.3 | 123.0 | 247.1 | 134.5 | 142.5 | 159.7 | 153.4 |
| August | 119.6 | 121.7 | 166.1 | 169.7 | 173.3 | 123.0 | 200.0 | 132.7 | 142.6 | 159.1 | 152.4 |
| September | 121.5 | 141.2 | 166.1 | 166.7 | 173.3 | 121.8 | 188.2 | 130.9 | 141.9 | 158.7 | 154.0 |
| October | 124.1 | 164.1 | 166.1 | 166.7 | 173.3 | 120.7 | 176.5 | 130.9 | 142.5 | 159.1 | 156.1 |
| November | 123.4 | 178.8 | 166.1 | 163.6 | 173.3 | 119.5 | 176.5 | 130.9 | 142.5 | 160.4 | 156.5 |
| December | 121.5 | 172.8 | 164.3 | 163.6 | 173.3 | 118.4 | 176.5 | 129.1 | 142.1 | 161.4 | 155.9 |
| 1928: January | 119.6 | 162.0 | 164.3 | 160.6 | 173.3 | 117.2 | 176.5 | 129.1 | 142.3 | 162.8 | 155.1 |
| February | 115.8 | 124.9 | 164.3 | 160.6 | 173.3 | 117.2 | 176.5 | 129.1 | 142.1 | 163.1 | 151.6 |
| March | 112.7 | 107.2 | 162.5 | 160.6 | 173.3 | 116.1 | 200.0 | 129.1 | 142.3 | 163.8 | 151.4 |
| April | 112.7 | 103.8 | 162.5 | 163.6 | 176.7 | 114.9 | 205.9 | 129.1 | 141.9 | 164.1 | 152.1 |
| May | 114.6 | 108.7 | 162.5 | 169.7 | 176.7 | 114.9 | 194.1 | 130.9 | 141.9 | 164.4 | 153.8 |
| June | 115.2 | 112.5 | 164.3 | 172.7 | 176.7 | 113.8 | 170.6 | 132.7 | 142.1 | 165.1 | 152.6 |
| July | 116.5 | 120.6 | 164.3 | 169.7 | 176.7 | 114.9 | 135.3 | 132.7 | 142.3 | 165.1 | 152.8 |
| August | 118.4 | 130.4 | 164.3 | 163.6 | 176.7 | 113.8 | 129.4 | 129.1 | 142.3 | 165.8 | 154.2 |
| September | 122.2 | 146.1 | 162.5 | 160.6 | 176.7 | 114.9 | 129.4 | 127.3 | 142.3 | 166.1 | 157.8 |
| October | 123.4 | 157.1 | 162.5 | 157.6 | 176.7 | 113.8 | 129.4 | 125.5 | 142.1 | 166.4 | 156.8 |

¹ 22 articles in 1913-1920; 43 articles in 1921-1928.

TABLE 4.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES OCTOBER 15, 1927, AND SEPTEMBER 15 AND OCTOBER 15, 1928

[Exact comparisons of prices in different cities can not be made for some articles, particularly meats and vegetables, owing to differences in trade practices]

| Article | Atlanta, Ga. | | | Baltimore, Md. | | | Birmingham, Ala. | | | Boston, Mass. | | | Bridgeport, Conn. | | |
|--|---------------|-----------|-----------|----------------|-----------|-----------|------------------|-----------|-----------|---------------|-----------|-----------|-------------------|-----------|-----------|
| | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | |
| | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 |
| Sirloin steak.....pound | Cts. 44.6 | Cts. 48.3 | Cts. 48.8 | Cts. 41.3 | Cts. 51.3 | Cts. 47.2 | Cts. 42.5 | Cts. 51.1 | Cts. 50.6 | Cts. 71.7 | Cts. 78.6 | Cts. 76.1 | Cts. 54.0 | Cts. 62.5 | Cts. 60.4 |
| Round steak.....do | 40.3 | 44.6 | 45.4 | 37.6 | 46.9 | 43.4 | 37.0 | 43.2 | 43.4 | 55.9 | 65.9 | 63.3 | 47.5 | 55.7 | 54.3 |
| Rib roast.....do | 33.3 | 36.4 | 35.9 | 31.5 | 36.9 | 36.3 | 30.2 | 34.8 | 34.9 | 40.6 | 47.2 | 44.9 | 41.0 | 44.9 | 44.1 |
| Chuck roast.....do | 25.2 | 29.5 | 30.0 | 23.4 | 30.7 | 30.3 | 23.3 | 29.0 | 29.8 | 30.4 | 35.3 | 33.6 | 21.3 | 37.7 | 37.5 |
| Plate beef.....do | 15.7 | 19.3 | 19.8 | 16.3 | 21.5 | 21.7 | 15.3 | 19.3 | 19.6 | 20.6 | 24.3 | 23.7 | 12.9 | 18.1 | 18.5 |
| Pork chops.....do | 38.9 | 39.8 | 37.9 | 40.7 | 44.2 | 34.5 | 38.2 | 38.7 | 36.4 | 47.3 | 48.6 | 39.2 | 44.8 | 49.1 | 40.2 |
| Bacon, sliced.....do | 45.4 | 44.2 | 44.5 | 41.7 | 40.5 | 40.6 | 46.4 | 42.9 | 42.6 | 45.8 | 43.3 | 43.1 | 50.7 | 50.9 | 49.8 |
| Ham, sliced.....do | 55.7 | 55.4 | 54.6 | 57.1 | 57.2 | 57.2 | 55.3 | 53.1 | 54.8 | 59.1 | 61.5 | 60.6 | 57.7 | 60.2 | 59.8 |
| Lamb, leg of.....do | 40.8 | 40.5 | 40.1 | 38.2 | 38.8 | 37.4 | 42.6 | 46.0 | 45.7 | 38.7 | 42.0 | 39.4 | 38.9 | 42.7 | 38.6 |
| Hens.....do | 36.5 | 35.0 | 36.1 | 37.6 | 40.2 | 39.8 | 34.2 | 32.0 | 32.3 | 39.9 | 41.2 | 40.8 | 40.2 | 41.2 | 41.9 |
| Salmon, canned, red.....pound | 34.0 | 34.3 | 34.3 | 32.1 | 31.3 | 30.6 | 34.7 | 35.4 | 34.2 | 33.6 | 31.9 | 31.4 | 32.8 | 32.6 | 32.3 |
| Milk, fresh.....quart | 18.0 | 16.5 | 16.5 | 14.0 | 14.0 | 14.0 | 16.7 | 18.7 | 18.7 | 15.5 | 15.8 | 15.8 | 16.0 | 16.0 | 16.0 |
| Milk, evaporated.....16-oz. can | 13.6 | 13.5 | 13.5 | 11.4 | 11.0 | 11.1 | 12.6 | 12.0 | 12.1 | 12.1 | 11.7 | 11.7 | 11.6 | 11.6 | 11.6 |
| Butter.....pound | 55.9 | 58.5 | 58.9 | 60.3 | 60.9 | 61.1 | 58.0 | 57.6 | 58.7 | 56.4 | 58.8 | 58.8 | 56.1 | 58.8 | 58.8 |
| Oleomargarine (all butter substitutes).....pound | 27.1 | 26.5 | 27.6 | 27.4 | 27.7 | 27.6 | 32.6 | 31.8 | 31.7 | 27.3 | 28.2 | 28.8 | 27.8 | 26.2 | 25.8 |
| Cheese.....do | 37.1 | 36.7 | 36.7 | 36.8 | 37.5 | 37.6 | 39.2 | 38.2 | 38.0 | 39.2 | 40.7 | 40.8 | 40.9 | 43.4 | 43.5 |
| Lard.....do | 20.5 | 18.8 | 18.6 | 18.6 | 18.5 | 18.5 | 19.8 | 19.1 | 19.3 | 19.9 | 19.3 | 19.3 | 19.1 | 18.5 | 18.5 |
| Vegetable lard substitute.....pound | 22.5 | 21.5 | 21.5 | 23.1 | 22.9 | 23.0 | 22.2 | 19.9 | 20.3 | 25.3 | 25.6 | 25.5 | 25.4 | 25.5 | 25.4 |
| Eggs, strictly fresh.....dozen | 54.3 | 45.5 | 50.5 | 53.3 | 46.4 | 51.5 | 48.1 | 46.9 | 49.3 | 79.8 | 71.0 | 73.0 | 77.9 | 70.3 | 76.2 |
| Eggs, storage.....do | 45.0 | | 43.0 | 39.7 | | 40.8 | 40.0 | | 40.8 | 50.3 | | 45.8 | 44.8 | | 42.0 |
| Bread.....pound | 10.8 | 10.8 | 10.8 | 9.9 | 9.6 | 8.6 | 10.3 | 10.0 | 9.9 | 8.5 | 8.6 | 8.6 | 8.8 | 8.8 | 8.8 |
| Flour.....do | 6.5 | 6.5 | 6.6 | 5.3 | 4.9 | 4.8 | 6.7 | 6.7 | 6.7 | 6.0 | 5.7 | 5.4 | 5.7 | 5.3 | 5.3 |
| Corn meal.....do | 4.1 | 4.3 | 4.3 | 4.2 | 4.1 | 4.2 | 4.2 | 4.2 | 4.1 | 6.7 | 6.9 | 6.8 | 7.8 | 7.2 | 7.2 |
| Rolled oats.....do | 9.4 | 9.1 | 8.8 | 8.3 | 8.2 | 8.0 | 10.3 | 9.9 | 9.8 | 8.9 | 8.9 | 9.0 | 8.4 | 8.6 | 8.5 |
| Corn flakes.....8-oz. package | 9.8 | 9.9 | 9.7 | 9.1 | 8.6 | 8.7 | 10.5 | 10.1 | 9.9 | 10.0 | 9.4 | 9.3 | 9.6 | 9.4 | 9.4 |
| Wheat cereal.....28-oz. package | 26.6 | 26.3 | 26.3 | 24.5 | 24.3 | 24.3 | 27.7 | 27.6 | 27.4 | 25.1 | 25.0 | 25.0 | 24.7 | 24.6 | 24.3 |
| Macaroni.....pound | 21.7 | 21.0 | 21.0 | 19.4 | 19.2 | 19.3 | 18.8 | 18.6 | 18.3 | 22.4 | 21.3 | 21.4 | 22.7 | 22.1 | 22.1 |
| Rice.....do | 10.0 | 9.2 | 9.4 | 9.5 | 9.0 | 8.9 | 10.7 | 9.3 | 9.3 | 12.2 | 11.1 | 10.6 | 11.4 | 10.1 | 10.1 |
| Beans, navy.....do | 10.5 | 13.3 | 13.7 | 8.7 | 12.1 | 12.3 | 10.4 | 12.8 | 13.1 | 10.4 | 12.3 | 12.1 | 9.5 | 12.0 | 12.4 |
| Potatoes.....do | 4.1 | 3.3 | 3.4 | 3.1 | 1.9 | 1.9 | 4.7 | 3.4 | 3.5 | 3.0 | 2.2 | 2.1 | 2.8 | 2.1 | 2.0 |
| Onions.....do | 7.3 | 7.5 | 7.6 | 4.2 | 7.0 | 7.0 | 6.7 | 6.9 | 7.3 | 4.5 | 6.9 | 7.3 | 5.1 | 5.8 | 6.6 |
| Cabbage.....do | 5.0 | 4.6 | 4.8 | 3.8 | 4.6 | 4.7 | 5.3 | 5.0 | 5.1 | 4.8 | 5.2 | 5.3 | 4.5 | 4.8 | 4.8 |
| Beans, baked.....No. 2 can | 11.4 | 11.0 | 11.3 | 10.8 | 10.7 | 10.8 | 11.8 | 11.0 | 11.2 | 13.3 | 12.4 | 12.4 | 11.7 | 11.6 | 11.5 |
| Corn, canned.....do | 18.2 | 17.5 | 17.4 | 14.7 | 15.4 | 16.5 | 16.8 | 16.8 | 16.8 | 17.9 | 17.6 | 17.3 | 18.5 | 19.0 | 19.0 |
| Peas, canned.....do | 19.7 | 19.2 | 19.2 | 15.0 | 15.1 | 14.9 | 21.0 | 20.0 | 19.5 | 20.0 | 19.9 | 19.5 | 20.7 | 21.2 | 20.6 |
| Tomatoes, canned.....No. 2 can | 11.1 | 10.4 | 11.2 | 10.5 | 10.2 | 10.5 | 10.9 | 10.1 | 10.4 | 11.3 | 12.3 | 12.7 | 13.7 | 13.5 | 13.3 |
| Sugar.....pound | 7.7 | 7.5 | 7.5 | 6.4 | 6.1 | 5.9 | 7.7 | 7.4 | 7.3 | 7.2 | 7.0 | 6.9 | 7.1 | 6.8 | 6.7 |
| Tea.....do | 103.3 | 105.9 | 103.9 | 73.4 | 73.5 | 73.6 | 98.5 | 97.4 | 97.4 | 72.9 | 72.3 | 72.3 | 60.9 | 61.0 | 61.0 |
| Coffee.....do | 48.2 | 49.8 | 50.3 | 43.0 | 44.8 | 44.8 | 51.2 | 51.3 | 51.4 | 51.7 | 53.6 | 53.9 | 46.0 | 47.9 | 47.9 |
| Prunes.....do | 14.9 | 14.9 | 14.9 | 12.4 | 11.9 | 11.8 | 17.8 | 16.5 | 16.5 | 14.7 | 12.8 | 13.4 | 15.6 | 15.4 | 14.2 |
| Raisins.....do | 15.9 | 14.3 | 13.0 | 13.0 | 12.4 | 11.0 | 15.0 | 14.1 | 13.1 | 13.0 | 12.2 | 11.9 | 14.2 | 13.0 | 12.5 |
| Bananas.....dozen | 29.0 | 29.4 | 29.4 | 25.8 | 24.5 | 24.5 | 37.8 | 38.3 | 37.5 | 45.0 | 41.7 | 42.5 | 36.5 | 32.5 | 34.2 |
| Oranges.....do | 53.2 | 63.2 | 50.8 | 57.7 | 65.1 | 63.1 | 53.2 | 61.2 | 58.3 | 70.1 | 75.1 | 70.4 | 69.3 | 74.0 | 75.5 |

¹ The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

TABLE 4.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES OCTOBER 15, 1927, AND SEPTEMBER 15 AND OCTOBER 15, 1928—Continued

| Article | Buffalo, N. Y. | | | Butte, Mont. | | | Charleston, S. C. | | | Chicago, Ill. | | | Cincinnati, Ohio | | |
|--|----------------|-----------|-----------|---------------|-----------|-----------|-------------------|-----------|-----------|---------------|-----------|-----------|------------------|-----------|-----------|
| | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | |
| | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 |
| Sirloin steak—pound | Cts. 43.6 | Cts. 53.7 | Cts. 50.0 | Cts. 33.2 | Cts. 36.6 | Cts. 35.9 | Cts. 32.3 | Cts. 38.6 | Cts. 37.9 | Cts. 48.0 | Cts. 58.7 | Cts. 57.7 | Cts. 39.5 | Cts. 48.5 | Cts. 47.4 |
| Round steak—do | 37.2 | 46.9 | 42.8 | 28.0 | 34.7 | 34.5 | 30.0 | 35.7 | 35.7 | 38.7 | 49.1 | 47.7 | 35.8 | 44.4 | 43.9 |
| Rib roast—do | 32.3 | 37.6 | 36.1 | 28.2 | 31.7 | 31.8 | 26.7 | 31.1 | 30.7 | 36.5 | 42.8 | 42.3 | 31.6 | 37.0 | 37.5 |
| Chuck roast—do | 25.4 | 32.0 | 31.4 | 20.3 | 24.7 | 25.3 | 20.8 | 25.0 | 25.0 | 27.8 | 36.5 | 35.6 | 23.1 | 29.0 | 29.5 |
| Plate beef—do | 15.0 | 20.0 | 19.8 | 13.2 | 17.2 | 18.0 | 14.5 | 18.6 | 18.3 | 16.0 | 21.0 | 21.0 | 16.3 | 20.8 | 21.4 |
| Pork chops—do | 46.1 | 49.7 | 38.7 | 37.5 | 39.5 | 35.5 | 34.0 | 35.7 | 35.6 | 42.5 | 45.7 | 37.0 | 41.2 | 45.9 | 35.5 |
| Bacon, sliced—do | 42.7 | 41.7 | 41.7 | 52.5 | 51.3 | 51.3 | 40.2 | 37.8 | 38.1 | 51.2 | 49.4 | 49.1 | 40.5 | 40.4 | 39.9 |
| Ham, sliced—do | 50.5 | 55.5 | 53.9 | 57.5 | 57.5 | 55.4 | 48.4 | 48.3 | 48.8 | 54.6 | 57.3 | 57.0 | 52.0 | 54.5 | 55.5 |
| Lamb, leg of—do | 33.2 | 36.7 | 34.0 | 37.1 | 37.7 | 37.4 | 39.4 | 43.3 | 43.3 | 38.0 | 41.2 | 38.4 | 35.5 | 39.8 | 39.3 |
| Hens—do | 37.1 | 40.4 | 39.6 | 32.9 | 34.9 | 33.4 | 35.5 | 36.7 | 37.3 | 36.8 | 41.0 | 39.6 | 34.3 | 39.4 | 38.9 |
| Salmon, canned, red—pound | 32.6 | 31.1 | 30.8 | 31.2 | 32.2 | 32.1 | 32.6 | 29.5 | 28.9 | 35.4 | 36.1 | 34.6 | 34.9 | 31.7 | 31.3 |
| Milk, fresh—quart | 13.0 | 13.0 | 14.0 | 14.0 | 14.0 | 14.0 | 19.0 | 18.7 | 18.7 | 14.0 | 14.0 | 14.0 | 13.3 | 14.0 | 14.0 |
| Milk, evaporated—16-oz. can | 11.3 | 11.1 | 11.1 | 11.1 | 10.5 | 10.7 | 11.8 | 11.5 | 11.7 | 11.3 | 11.1 | 11.2 | 11.3 | 11.2 | 11.2 |
| Butter—pound | 56.5 | 58.0 | 57.7 | 51.9 | 55.8 | 56.0 | 50.8 | 55.6 | 56.4 | 54.3 | 56.1 | 55.2 | 54.1 | 59.1 | 58.6 |
| Oleomargarine (all butter substitutes)—pound | 27.4 | 27.5 | 27.3 | | | | 29.2 | 28.7 | 29.0 | 27.4 | 26.7 | 27.0 | 28.6 | 28.2 | 28.8 |
| Cheese—do | 38.9 | 39.9 | 39.5 | 36.5 | 38.2 | 37.7 | 35.6 | 35.4 | 35.5 | 42.5 | 43.3 | 44.0 | 39.1 | 40.1 | 40.3 |
| Lard—do | 19.1 | 18.4 | 18.6 | 23.6 | 22.0 | 22.1 | 19.7 | 18.7 | 18.7 | 19.8 | 19.5 | 19.7 | 18.4 | 19.1 | 18.9 |
| Vegetable lard substitute—pound | 25.9 | 25.7 | 25.7 | 30.5 | 30.3 | 30.6 | 22.2 | 21.3 | 21.6 | 26.3 | 26.2 | 26.2 | 26.2 | 25.7 | 25.6 |
| Eggs, strictly fresh—dozen | 58.8 | 52.4 | 57.2 | 54.8 | 49.5 | 54.4 | 56.7 | 50.1 | 53.8 | 53.7 | 50.6 | 50.1 | 56.2 | 48.2 | 49.9 |
| Eggs, storage—dozen | 42.9 | | 44.9 | 39.4 | | 42.7 | 39.4 | | 41.4 | 43.2 | | 43.0 | 39.9 | | 40.3 |
| Bread—pound | 8.7 | 8.7 | 8.7 | 9.8 | 9.8 | 9.8 | 10.9 | 11.0 | 11.0 | 9.9 | 9.9 | 9.9 | 8.7 | 8.5 | 8.5 |
| Flour—do | 4.8 | 4.7 | 4.7 | 5.4 | 5.2 | 5.0 | 6.7 | 6.8 | 6.8 | 5.1 | 4.6 | 4.6 | 5.8 | 5.6 | 5.6 |
| Corn meal—do | 4.7 | 5.0 | 5.1 | 6.1 | 6.2 | 6.2 | 3.9 | 3.9 | 4.0 | 6.6 | 7.0 | 7.0 | 4.5 | 4.6 | 4.6 |
| Rolled oats—do | 8.7 | 8.7 | 8.9 | 7.5 | 7.8 | 7.7 | 9.5 | 9.2 | 9.4 | 8.5 | 8.4 | 8.4 | 8.9 | 9.0 | 9.0 |
| Corn flakes—8-oz. package | 9.5 | 9.1 | 9.1 | 10.5 | 10.5 | 10.3 | 9.9 | 10.2 | 10.0 | 9.5 | 9.2 | 9.3 | 9.4 | 9.6 | 9.6 |
| Wheat cereal—28-oz. package | 24.8 | 25.0 | 24.9 | 28.5 | 28.1 | 28.1 | 25.7 | 25.6 | 25.5 | 25.4 | 25.7 | 25.4 | 25.1 | 24.9 | 24.9 |
| Macaroni—pound | 21.4 | 21.3 | 21.2 | 19.5 | 19.5 | 19.7 | 18.7 | 18.5 | 18.5 | 18.9 | 19.1 | 18.9 | 18.5 | 18.1 | 18.5 |
| Rice—do | 10.3 | 9.9 | 9.5 | 11.0 | 11.3 | 11.3 | 7.1 | 6.8 | 6.7 | 10.7 | 10.5 | 10.5 | 10.2 | 10.0 | 9.8 |
| Beans, navy—do | 9.4 | 12.6 | 12.4 | 9.8 | 11.4 | 11.4 | 10.1 | 13.4 | 14.5 | 9.6 | 13.0 | 12.7 | 8.8 | 13.1 | 12.7 |
| Potatoes—do | 2.7 | 2.0 | 2.0 | 1.5 | 1.9 | 1.6 | 3.4 | 2.3 | 2.5 | 2.9 | 2.3 | 2.1 | 3.2 | 2.4 | 2.3 |
| Onions—do | 5.8 | 6.6 | 6.4 | 4.1 | 4.8 | 4.8 | 5.7 | 6.6 | 6.9 | 4.9 | 5.7 | 5.9 | 4.7 | 5.6 | 6.0 |
| Cabbage—do | 3.3 | 3.8 | 3.8 | 3.3 | 4.0 | 3.5 | 4.2 | 5.2 | 5.4 | 4.3 | 4.0 | 4.1 | 3.7 | 4.4 | 4.5 |
| Beans, baked—No. 2 can | 10.1 | 10.1 | 10.1 | 13.3 | 13.8 | 13.8 | 10.0 | 10.4 | 10.3 | 12.5 | 12.9 | 12.9 | 10.5 | 10.7 | 11.0 |
| Corn, canned—do | 15.5 | 15.8 | 15.8 | 14.4 | 14.8 | 14.8 | 14.7 | 14.5 | 14.2 | 16.0 | 16.1 | 15.7 | 15.1 | 15.2 | 15.3 |
| Peas, canned—do | 16.0 | 16.1 | 16.3 | 13.8 | 13.9 | 13.8 | 16.7 | 16.2 | 16.2 | 16.1 | 17.2 | 17.0 | 17.1 | 16.9 | 16.7 |
| Tomatoes, canned—No. 2 can | 13.2 | 12.6 | 12.5 | 12.8 | 13.3 | 12.8 | 9.9 | 9.8 | 10.0 | 14.1 | 13.6 | 13.6 | 11.7 | 11.9 | 12.3 |
| Sugar—pound | 6.9 | 6.7 | 6.5 | 8.6 | 8.3 | 8.3 | 6.7 | 6.6 | 6.6 | 7.0 | 6.9 | 6.8 | 7.5 | 7.3 | 7.3 |
| Tea—do | 67.9 | 68.1 | 68.2 | 83.1 | 82.0 | 83.1 | 82.4 | 81.5 | 82.4 | 71.3 | 69.2 | 69.2 | 78.4 | 79.8 | 81.0 |
| Coffee—do | 45.4 | 46.8 | 47.1 | 54.0 | 55.5 | 55.5 | 42.8 | 45.8 | 46.2 | 46.3 | 47.7 | 47.6 | 43.0 | 45.4 | 46.1 |
| Prunes—do | 13.6 | 13.7 | 13.8 | 14.9 | 14.7 | 14.7 | 12.4 | 11.1 | 11.5 | 16.9 | 15.5 | 15.5 | 13.7 | 13.7 | 14.3 |
| Raisins—do | 13.7 | 12.6 | 12.4 | 14.8 | 14.4 | 14.0 | 14.0 | 12.0 | 10.2 | 14.8 | 13.8 | 13.2 | 14.3 | 13.9 | 13.5 |
| Bananas—dozen | 41.9 | 37.4 | 39.6 | 12.7 | 11.8 | 12.5 | 27.0 | 25.6 | 26.0 | 38.3 | 38.3 | 39.0 | 38.3 | 39.2 | 38.3 |
| Oranges—do | 65.7 | 66.6 | 63.8 | 56.2 | 67.5 | 67.5 | 35.0 | 67.0 | 43.6 | 65.6 | 67.2 | 66.5 | 57.5 | 64.5 | 63.4 |

¹ Per pound.

TABLE 4.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES OCTOBER 15, 1927, AND SEPTEMBER 15 AND OCTOBER 15, 1928—Continued

| Article | Cleveland, Ohio | | | Columbus, Ohio | | | Dallas, Tex. | | | Denver, Colo. | | | Detroit, Mich. | | |
|--|-----------------|-----------|-----------|----------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|----------------|-----------|-----------|
| | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | |
| | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 |
| Sirloin steak.....pound | Cts. 41.8 | Cts. 50.9 | Cts. 47.5 | Cts. 41.6 | Cts. 50.7 | Cts. 50.2 | Cts. 37.9 | Cts. 43.6 | Cts. 43.8 | Cts. 34.9 | Cts. 43.8 | Cts. 43.1 | Cts. 44.4 | Cts. 53.7 | Cts. 51.8 |
| Round steak.....do | 35.7 | 54.5 | 42.4 | 37.5 | 44.3 | 45.2 | 35.0 | 41.3 | 40.7 | 30.0 | 39.7 | 39.9 | 37.3 | 45.2 | 44.1 |
| Rib roast.....do | 29.7 | 35.9 | 34.3 | 32.3 | 37.9 | 38.6 | 27.9 | 34.9 | 36.3 | 24.8 | 32.9 | 31.7 | 32.8 | 38.6 | 37.7 |
| Chuck roast.....do | 25.0 | 31.2 | 30.3 | 26.4 | 33.0 | 33.7 | 23.5 | 28.8 | 30.0 | 20.3 | 27.5 | 27.2 | 25.4 | 31.7 | 31.5 |
| Plate beef.....do | 15.2 | 20.7 | 19.7 | 16.8 | 22.4 | 23.1 | 18.5 | 22.3 | 24.1 | 12.4 | 16.6 | 17.5 | 15.2 | 20.6 | 20.0 |
| Pork chops.....do | 43.6 | 47.9 | 36.1 | 40.3 | 42.4 | 36.8 | 39.1 | 38.4 | 37.9 | 38.2 | 43.2 | 36.5 | 44.5 | 49.0 | 40.7 |
| Bacon, sliced.....do | 44.7 | 44.7 | 44.0 | 48.8 | 46.8 | 47.0 | 47.9 | 45.2 | 46.5 | 46.3 | 44.5 | 44.9 | 47.9 | 47.2 | 46.1 |
| Ham, sliced.....do | 53.3 | 58.0 | 55.3 | 52.5 | 55.4 | 55.4 | 54.8 | 56.8 | 57.1 | 51.5 | 54.8 | 54.5 | 56.0 | 60.8 | 60.2 |
| Lamb, leg of.....do | 36.4 | 39.8 | 37.5 | 42.5 | 46.7 | 44.2 | 44.1 | 45.3 | 47.2 | 36.2 | 36.8 | 36.6 | 39.1 | 41.2 | 39.6 |
| Hens.....do | 35.7 | 39.9 | 38.9 | 36.1 | 38.2 | 38.2 | 31.7 | 32.4 | 34.1 | 28.1 | 30.6 | 31.6 | 36.5 | 40.6 | 39.7 |
| Salmon, canned, red.....pound | 34.6 | 32.5 | 32.3 | 36.6 | 37.2 | 35.7 | 37.9 | 37.4 | 35.5 | 35.8 | 34.2 | 33.6 | 35.5 | 32.6 | 30.1 |
| Milk, fresh.....do | 14.0 | 13.3 | 13.3 | 12.0 | 11.0 | 11.0 | 13.0 | 13.0 | 13.0 | 12.0 | 12.0 | 12.0 | 14.0 | 14.0 | 14.0 |
| Milk, evaporated.....16-oz. can | 11.4 | 11.3 | 11.2 | 11.6 | 11.4 | 11.5 | 13.2 | 13.4 | 13.5 | 10.6 | 10.6 | 10.7 | 11.3 | 11.0 | 11.0 |
| Butter.....pound | 58.8 | 60.3 | 59.7 | 55.1 | 57.2 | 56.5 | 55.4 | 58.3 | 58.7 | 50.9 | 52.6 | 52.5 | 56.8 | 57.0 | 56.5 |
| Oleomargarine (all butter substitutes).....pound | 28.8 | 28.7 | 29.0 | 28.1 | 27.0 | 27.4 | 30.3 | 29.2 | 28.5 | 24.6 | 24.6 | 25.0 | 27.8 | 25.4 | 26.6 |
| Cheese.....do | 39.4 | 40.4 | 40.8 | 37.3 | 37.5 | 38.0 | 38.3 | 38.0 | 37.9 | 39.0 | 40.5 | 40.7 | 40.3 | 40.3 | 39.5 |
| Lard.....do | 20.9 | 20.5 | 20.7 | 17.3 | 17.2 | 17.3 | 23.9 | 21.7 | 20.9 | 19.8 | 19.3 | 19.6 | 19.5 | 19.0 | 19.2 |
| Vegetable lard substitute.....pound | 26.9 | 26.6 | 26.6 | 26.2 | 27.8 | 27.3 | 23.6 | 24.1 | 22.4 | 22.2 | 22.2 | 21.8 | 26.8 | 26.3 | 26.4 |
| Eggs, strictly fresh.....dozen | 60.6 | 53.1 | 55.6 | 45.7 | 42.7 | 45.1 | 46.2 | 43.3 | 48.5 | 54.6 | 42.9 | 49.9 | 54.3 | 50.2 | 53.4 |
| Eggs, storage.....do | 42.3 | --- | 43.0 | 42.0 | --- | 40.0 | 35.0 | --- | 41.0 | 40.5 | --- | 41.1 | 41.5 | --- | 42.2 |
| Bread.....pound | 7.7 | 7.8 | 7.8 | 7.7 | 7.8 | 7.8 | 9.5 | 9.3 | 9.2 | 8.0 | 7.9 | 7.7 | 8.3 | 8.1 | 8.1 |
| Flour.....do | 5.6 | 5.6 | 5.4 | 5.1 | 5.1 | 5.1 | 5.5 | 5.3 | 5.2 | 4.3 | 4.1 | 4.0 | 5.3 | 4.9 | 4.7 |
| Corn meal.....do | 5.5 | 5.7 | 5.8 | 4.1 | 4.4 | 4.3 | 4.6 | 4.8 | 4.6 | 4.4 | 4.5 | 4.5 | 6.1 | 6.1 | 6.1 |
| Rolled oats.....do | 9.5 | 9.3 | 9.2 | 9.1 | 9.1 | 9.1 | 10.5 | 10.2 | 10.1 | 7.7 | 7.5 | 7.5 | 9.6 | 9.4 | 9.2 |
| Corn flakes.....8-oz. package | 9.8 | 10.0 | 10.0 | 9.5 | 9.8 | 9.6 | 10.6 | 10.2 | 10.2 | 9.7 | 9.5 | 9.5 | 9.8 | 9.4 | 9.4 |
| Wheat cereal.....28-oz. package | 25.3 | 25.6 | 25.8 | 26.0 | 26.7 | 26.4 | 27.6 | 27.6 | 27.4 | 24.6 | 24.5 | 24.6 | 25.9 | 25.4 | 25.4 |
| Macaroni.....pound | 21.5 | 20.9 | 20.8 | 21.0 | 20.4 | 20.1 | 21.7 | 21.8 | 21.1 | 19.4 | 19.4 | 19.4 | 22.3 | 21.6 | 21.1 |
| Rice.....do | 11.0 | 10.1 | 10.1 | 12.0 | 11.6 | 11.4 | 12.3 | 11.8 | 11.6 | 9.7 | 9.2 | 8.9 | 11.4 | 11.2 | 10.8 |
| Beans, navy.....do | 8.8 | 12.4 | 12.6 | 8.8 | 14.1 | 12.8 | 10.9 | 12.8 | 12.9 | 10.0 | 12.2 | 11.4 | 8.9 | 12.8 | 12.5 |
| Potatoes.....do | 3.2 | 2.3 | 2.3 | 3.0 | 2.2 | 2.1 | 4.8 | 4.4 | 4.4 | 2.0 | 1.4 | 1.5 | 2.6 | 1.8 | 1.6 |
| Onions.....do | 4.6 | 6.0 | 6.5 | 4.9 | 7.0 | 6.5 | 6.9 | 6.7 | 7.3 | 4.3 | 4.6 | 4.7 | 4.4 | 5.5 | 5.6 |
| Cabbage.....do | 4.1 | 4.9 | 4.8 | 4.5 | 4.6 | 4.4 | 5.8 | 5.4 | 5.2 | 2.6 | 2.1 | 2.1 | 3.4 | 4.0 | 3.8 |
| Beans, baked.....No. 2 can | 12.8 | 12.4 | 12.3 | 12.6 | 11.8 | 12.3 | 13.2 | 12.2 | 12.5 | 10.6 | 11.7 | 11.4 | 11.3 | 11.5 | 11.6 |
| Corn, canned.....do | 16.9 | 17.1 | 16.8 | 13.9 | 14.5 | 14.3 | 18.4 | 19.2 | 18.6 | 14.0 | 14.0 | 13.9 | 16.5 | 15.6 | 15.7 |
| Peas, canned.....do | 17.9 | 17.5 | 17.5 | 14.8 | 14.8 | 14.8 | 21.5 | 22.3 | 22.3 | 15.2 | 15.0 | 15.0 | 17.0 | 15.7 | 15.7 |
| Tomatoes, canned.....No. 2 can | 14.2 | 13.9 | 13.8 | 12.8 | 11.9 | 13.0 | 12.5 | 11.9 | 11.8 | 12.2 | 11.9 | 11.8 | 12.7 | 11.9 | 12.4 |
| Sugar.....pound | 7.6 | 7.6 | 7.5 | 7.7 | 7.6 | 7.5 | 8.0 | 7.7 | 7.6 | 7.8 | 7.6 | 7.3 | 7.5 | 7.2 | 7.1 |
| Tea.....do | 81.2 | 79.4 | 78.1 | 89.3 | 86.2 | 86.5 | 107.5 | 104.8 | 102.9 | 70.3 | 70.0 | 70.0 | 74.5 | 75.0 | 74.8 |
| Coffee.....do | 50.8 | 51.9 | 52.5 | 47.3 | 49.3 | 49.5 | 57.1 | 58.9 | 59.1 | 47.9 | 50.0 | 50.0 | 47.6 | 49.9 | 49.6 |
| Prunes.....do | 14.7 | 13.7 | 13.8 | 16.0 | 15.1 | 15.2 | 18.6 | 18.4 | 17.0 | 14.9 | 14.8 | 14.4 | 16.4 | 14.6 | 14.4 |
| Raisins.....do | 14.6 | 13.6 | 12.9 | 14.8 | 13.1 | 12.5 | 15.7 | 14.2 | 14.4 | 14.1 | 12.2 | 11.0 | 14.3 | 12.5 | 11.6 |
| Bananas.....dozen | 10.3 | 9.3 | 9.5 | 38.6 | 37.0 | 39.0 | 35.0 | 41.7 | 35.0 | 11.4 | 9.7 | 10.8 | 34.8 | 33.0 | 35.0 |
| Oranges.....do | 60.8 | 69.7 | 68.5 | 62.9 | 63.8 | 68.6 | 54.0 | 62.4 | 62.2 | 46.8 | 60.1 | 62.0 | 68.7 | 70.7 | 69.7 |

¹ Per pound.

TABLE 4.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES OCTOBER 15, 1927, AND SEPTEMBER 15 AND OCTOBER 15, 1928—Continued

| Article | Fall River, Mass. | | | Houston, Tex. | | | Indianapolis, Ind. | | | Jacksonville, Fla. | | | Kansas City, Mo. | | |
|--|----------------------|----------|---------|---------------|----------|---------|-----------------------|----------|---------|-----------------------|----------|---------|---------------------|----------|---------|
| | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | |
| | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 |
| Sirloin steak pound | 66.3 | 78.4 | 74.3 | 35.0 | 39.3 | 39.1 | 41.5 | 50.3 | 47.1 | 35.8 | 40.8 | 40.0 | 40.0 | 48.3 | 47.9 |
| Round steak do | 49.1 | 60.5 | 59.1 | 33.6 | 38.0 | 38.2 | 38.8 | 48.2 | 45.7 | 31.2 | 35.1 | 35.0 | 34.9 | 43.8 | 43.3 |
| Rib roast do | 34.0 | 40.8 | 41.5 | 27.3 | 30.7 | 29.8 | 29.9 | 36.0 | 35.3 | 27.3 | 31.3 | 31.1 | 28.1 | 34.8 | 33.4 |
| Chuck roast do | 25.4 | 33.1 | 32.7 | 22.3 | 24.8 | 24.7 | 25.7 | 31.9 | 30.6 | 20.4 | 24.3 | 24.5 | 21.3 | 27.4 | 27.3 |
| Plate beef do | 14.7 | 21.0 | 20.0 | 18.3 | 20.8 | 21.2 | 15.8 | 22.0 | 21.7 | 13.0 | 16.2 | 16.0 | 15.6 | 20.0 | 19.9 |
| Pork chops do | 41.9 | 41.7 | 39.8 | 36.8 | 37.7 | 34.4 | 41.5 | 45.0 | 39.0 | 34.1 | 34.2 | 32.5 | 42.5 | 44.3 | 34.9 |
| Bacon, sliced do | 43.8 | 42.5 | 42.7 | 45.1 | 41.0 | 42.1 | 43.7 | 44.0 | 44.6 | 42.2 | 38.6 | 39.4 | 46.8 | 45.0 | 44.6 |
| Ham, sliced do | 52.9 | 52.8 | 53.2 | 50.0 | 48.5 | 49.5 | 53.5 | 56.3 | 54.9 | 49.6 | 49.6 | 49.6 | 51.5 | 54.9 | 53.9 |
| Lamb, leg of do | 40.9 | 42.9 | 40.6 | 32.0 | 33.8 | 31.6 | 37.8 | 42.0 | 40.9 | 38.8 | 40.8 | 40.0 | 35.9 | 37.6 | 35.6 |
| Hens do | 43.6 | 45.8 | 45.2 | 30.6 | 37.4 | 36.9 | 36.4 | 40.0 | 39.5 | 34.2 | 33.1 | 35.0 | 30.7 | 33.1 | 33.6 |
| Salmon, canned, red pound | 34.5 | 35.4 | 34.7 | 33.8 | 31.8 | 31.1 | 34.2 | 34.0 | 32.3 | 34.6 | 33.5 | 32.7 | 35.6 | 35.7 | 35.6 |
| Milk, fresh quart | 15.0 | 14.7 | 14.7 | 15.6 | 15.0 | 15.0 | 12.0 | 12.0 | 12.0 | 20.3 | 20.3 | 20.3 | 13.0 | 13.0 | 13.0 |
| Milk, evaporated, 16-oz. can | 12.8 | 12.5 | 12.8 | 11.6 | 11.1 | 11.3 | 10.8 | 10.8 | 10.5 | 11.7 | 11.5 | 11.5 | 11.8 | 11.6 | 11.3 |
| Butter pound | 54.4 | 57.7 | 57.5 | 53.9 | 56.1 | 55.9 | 54.6 | 57.3 | 56.8 | 55.0 | 57.4 | 57.2 | 53.1 | 55.3 | 55.1 |
| Oleomargarine (all butter substitutes) pound | 29.7 | 26.0 | 27.1 | 27.3 | 25.2 | 24.8 | 29.3 | 29.2 | 28.6 | 30.4 | 30.0 | 29.7 | 25.5 | 25.7 | 25.7 |
| Cheese do | 40.7 | 41.9 | 42.5 | 35.3 | 33.9 | 34.0 | 39.0 | 41.0 | 42.8 | 36.6 | 35.6 | 35.5 | 38.3 | 38.0 | 37.5 |
| Lard do | 18.9 | 19.3 | 19.2 | 20.6 | 19.5 | 19.7 | 17.9 | 18.0 | 17.7 | 21.8 | 19.2 | 19.1 | 19.9 | 19.5 | 19.1 |
| Vegetable lard substitute pound | 26.7 | 27.1 | 26.4 | 18.2 | 15.7 | 16.6 | 27.4 | 26.6 | 26.8 | 22.0 | 22.2 | 22.1 | 26.6 | 25.8 | 25.7 |
| Eggs, strictly fresh, dozen | 76.4 | 67.5 | 76.6 | 43.1 | 43.3 | 45.2 | 50.6 | 44.3 | 47.5 | 56.7 | 56.2 | 64.1 | 49.4 | 42.6 | 43.8 |
| Eggs, storage do | 46.9 | | 49.1 | 36.0 | | 38.0 | 45.0 | | 38.5 | 40.7 | | 47.8 | 40.5 | | 40.0 |
| Bread pound | 9.0 | 8.8 | 8.8 | 8.5 | 8.2 | 8.0 | 8.1 | 7.9 | 7.9 | 10.9 | 10.2 | 10.1 | 9.7 | 9.7 | 9.6 |
| Flour do | 5.6 | 5.8 | 5.7 | 5.1 | 5.0 | 5.0 | 5.5 | 5.3 | 5.2 | 6.5 | 6.3 | 6.1 | 4.9 | 4.9 | 4.8 |
| Corn meal do | 6.6 | 7.1 | 7.2 | 4.3 | 4.2 | 4.3 | 4.3 | 4.1 | 4.1 | 4.4 | 4.4 | 4.3 | 5.2 | 5.4 | 5.4 |
| Rollod oats do | 9.4 | 9.7 | 9.7 | 8.9 | 8.5 | 8.5 | 8.5 | 8.9 | 8.5 | 9.3 | 9.4 | 9.3 | 9.1 | 9.2 | 9.1 |
| Corn flakes 8-oz. package | 10.2 | 9.8 | 9.8 | 9.3 | 8.6 | 8.7 | 9.4 | 9.3 | 8.9 | 9.9 | 9.5 | 9.5 | 10.0 | 9.7 | 9.7 |
| Wheat cereal 28-oz. package | 25.0 | 25.3 | 25.3 | 25.0 | 25.2 | 25.2 | 25.9 | 25.7 | 25.6 | 24.6 | 25.7 | 25.2 | 27.3 | 27.2 | 27.1 |
| Macaroni pound | 24.2 | 23.6 | 22.9 | 18.3 | 18.2 | 18.1 | 19.2 | 19.3 | 18.7 | 19.2 | 19.7 | 19.7 | 20.0 | 20.2 | 20.1 |
| Rice do | 10.8 | 11.2 | 10.8 | 8.5 | 7.3 | 7.1 | 10.8 | 11.3 | 10.7 | 9.4 | 7.4 | 7.2 | 9.6 | 9.7 | 9.2 |
| Beans, navy do | 10.8 | 12.7 | 12.8 | 10.1 | 12.5 | 12.4 | 9.1 | 14.2 | 12.9 | 9.2 | 12.4 | 12.8 | 9.7 | 13.1 | 12.8 |
| Potatoes do | 3.1 | 1.8 | 1.9 | 4.4 | 3.7 | 3.9 | 2.8 | 2.1 | 2.0 | 3.9 | 3.2 | 3.2 | 2.5 | 1.4 | 1.5 |
| Onions do | 5.1 | 7.2 | 7.5 | 5.2 | 4.9 | 5.6 | 5.8 | 6.9 | 6.5 | 6.0 | 7.2 | 7.7 | 5.3 | 6.0 | 7.2 |
| Cabbage do | 4.9 | 6.1 | 5.7 | 5.3 | 4.8 | 4.8 | 4.3 | 3.8 | 4.1 | 4.2 | 4.7 | 4.7 | 3.9 | 3.6 | 3.7 |
| Beans, baked No. 2 can | 11.9 | 12.4 | 12.8 | 10.8 | 11.1 | 10.9 | 10.3 | 10.2 | 10.4 | 10.5 | 10.5 | 10.5 | 12.2 | 12.1 | 11.8 |
| Corn, canned do | 17.0 | 17.3 | 17.2 | 13.5 | 14.3 | 14.5 | 14.0 | 14.0 | 13.8 | 17.5 | 17.2 | 17.2 | 14.5 | 14.7 | 14.2 |
| Peas, canned do | 18.5 | 19.6 | 19.6 | 13.4 | 14.7 | 14.8 | 13.8 | 14.5 | 14.5 | 17.6 | 16.4 | 16.5 | 15.3 | 15.2 | 15.4 |
| Tomatoes, canned, No. 2 can | 13.1 | 12.3 | 12.6 | 9.8 | 9.8 | 9.9 | 12.9 | 12.3 | 12.4 | 9.8 | 9.9 | 10.5 | 11.4 | 11.1 | 11.0 |
| Sugar pound | 7.3 | 7.0 | 6.8 | 6.9 | 6.9 | 6.8 | 7.5 | 7.5 | 7.3 | 7.5 | 7.3 | 7.1 | 7.5 | 7.5 | 7.2 |
| Tea do | 63.8 | 59.2 | 58.3 | 84.2 | 84.4 | 85.7 | 85.3 | 86.3 | 84.8 | 98.7 | 96.7 | 96.7 | 92.0 | 93.4 | 93.4 |
| Coffee do | 48.5 | 50.5 | 50.9 | 40.3 | 43.5 | 44.3 | 47.5 | 48.2 | 47.8 | 46.4 | 49.3 | 49.3 | 48.9 | 52.4 | 52.2 |
| Prunes do | 14.8 | 13.3 | 13.5 | 13.4 | 13.3 | 13.0 | 17.3 | 17.0 | 15.0 | 15.9 | 15.5 | 16.1 | 14.8 | 14.5 | 14.4 |
| Raisins do | 14.2 | 12.8 | 13.2 | 13.4 | 11.7 | 12.0 | 15.5 | 14.5 | 13.6 | 14.8 | 14.1 | 14.0 | 14.8 | 12.9 | 12.7 |
| Bananas dozen | 9.8 | 8.8 | 9.0 | 26.3 | 26.2 | 26.8 | 31.0 | 31.7 | 29.0 | 30.8 | 27.1 | 28.6 | 10.3 | 10.7 | 10.7 |
| Oranges do | 62.9 | 72.8 | 61.5 | 39.4 | 51.8 | 51.3 | 55.0 | 62.6 | 62.5 | 56.3 | 102.5 | 35.8 | 55.0 | 63.7 | 64.1 |

¹ The steak for which prices are here quoted is called "rump" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

² Per pound.

TABLE 4.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES OCTOBER 15, 1927, AND SEPTEMBER 15 AND OCTOBER 15, 1928—Continued

| Article | Little Rock, Ark. | | | Los Angeles, Calif. | | | Louisville, Ky. | | | Manchester, N. H. | | | Memphis, Tenn. | | |
|--|-------------------|-----------|-----------|---------------------|-----------|-----------|-----------------|-----------|-----------|-------------------|-----------|-----------|----------------|-----------|-----------|
| | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | |
| | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 |
| Sirloin steak, pound | Cts. 38.2 | Cts. 45.8 | Cts. 44.1 | Cts. 39.1 | Cts. 45.4 | Cts. 45.4 | Cts. 37.5 | Cts. 46.5 | Cts. 45.0 | Cts. 60.0 | Cts. 69.9 | Cts. 65.9 | Cts. 39.8 | Cts. 49.0 | Cts. 49.4 |
| Round steak, do | 35.4 | 40.2 | 39.9 | 31.3 | 37.3 | 38.6 | 34.1 | 42.3 | 39.2 | 46.8 | 56.6 | 54.5 | 37.3 | 44.8 | 46.3 |
| Rib roast, do | 30.7 | 36.1 | 35.2 | 30.5 | 35.6 | 36.1 | 27.1 | 33.8 | 32.1 | 29.9 | 37.1 | 35.5 | 28.4 | 34.7 | 34.9 |
| Chuck roast, do | 23.4 | 28.1 | 28.5 | 21.3 | 26.6 | 27.9 | 21.7 | 27.0 | 26.9 | 24.1 | 32.4 | 31.1 | 22.9 | 29.0 | 28.9 |
| Plate beef, do | 18.3 | 21.2 | 20.8 | 14.7 | 19.1 | 20.7 | 16.7 | 21.7 | 21.2 | 16.8 | 24.0 | 24.0 | 18.9 | 22.7 | 22.4 |
| Pork chops, do | 37.8 | 38.0 | 34.8 | 46.0 | 50.3 | 44.4 | 38.2 | 43.6 | 34.6 | 42.3 | 43.3 | 36.6 | 37.4 | 38.2 | 34.4 |
| Bacon, sliced, do | 46.8 | 46.0 | 44.7 | 55.0 | 53.2 | 53.8 | 47.5 | 45.6 | 45.4 | 38.9 | 39.1 | 38.8 | 38.9 | 37.7 | 37.6 |
| Ham, sliced, do | 52.7 | 53.5 | 53.9 | 68.5 | 72.4 | 71.3 | 50.4 | 53.5 | 51.2 | 44.1 | 48.1 | 48.1 | 52.4 | 53.5 | 53.2 |
| Lamb, leg of, do | 38.6 | 42.8 | 41.8 | 37.3 | 38.2 | 38.1 | 41.7 | 38.6 | 37.4 | 36.6 | 40.4 | 37.8 | 36.2 | 38.0 | 37.0 |
| Hens, do | 30.8 | 30.4 | 31.4 | 41.4 | 44.7 | 46.4 | 35.6 | 35.4 | 36.4 | 41.3 | 42.9 | 42.8 | 31.9 | 31.3 | 32.8 |
| Salmon, canned, red | 33.4 | 33.5 | 34.0 | 33.5 | 31.1 | 29.9 | 32.6 | 33.3 | 32.1 | 34.8 | 33.0 | 31.4 | 31.9 | 33.4 | 33.4 |
| Milk, fresh, quart | 15.0 | 14.0 | 14.0 | 15.0 | 15.0 | 15.0 | 13.0 | 12.8 | 12.8 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 |
| Milk, evaporated | 12.2 | 11.8 | 11.8 | 10.2 | 9.9 | 9.9 | 11.9 | 11.9 | 11.9 | 12.8 | 12.7 | 12.6 | 11.6 | 11.4 | 11.6 |
| Butter, 16-oz. can | 53.8 | 55.5 | 55.7 | 57.1 | 60.0 | 59.9 | 55.8 | 58.9 | 59.0 | 56.4 | 59.0 | 59.0 | 54.8 | 56.6 | 56.3 |
| Oleomargarine (all butter substitutes) | 27.8 | 26.8 | 26.8 | 26.3 | 25.3 | 25.3 | 27.1 | 32.5 | 27.9 | 24.8 | 28.1 | 28.3 | 25.6 | 24.4 | 24.4 |
| Cheese, do | 38.5 | 38.4 | 37.4 | 38.4 | 38.6 | 38.3 | 38.6 | 8.5 | 39.4 | 37.2 | 38.9 | 39.1 | 38.4 | 36.4 | 36.2 |
| Lard, do | 22.9 | 20.5 | 20.4 | 20.3 | 20.8 | 21.4 | 19.2 | 9.1 | 18.7 | 18.8 | 18.4 | 18.5 | 16.7 | 17.1 | 17.3 |
| Vegetable lard substitute, pound | 20.7 | 20.3 | 21.1 | 24.2 | 24.1 | 24.5 | 28.5 | 27.3 | 27.4 | 26.5 | 25.9 | 25.8 | 21.6 | 21.0 | 21.0 |
| Eggs, strictly fresh, dozen | 46.8 | 44.4 | 46.7 | 53.9 | 51.5 | 57.4 | 48.8 | 43.1 | 46.6 | 68.3 | 64.6 | 65.2 | 43.7 | 41.4 | 43.8 |
| Eggs, storage, do | 40.0 | | 45.0 | 44.0 | | 45.3 | | | 46.4 | | 49.3 | 39.0 | | 39.8 | |
| Bread, pound | 9.2 | 9.3 | 9.3 | 8.5 | 8.7 | 8.6 | 9.2 | 9.1 | 9.2 | 8.7 | 8.7 | 8.7 | 9.5 | 9.5 | 9.5 |
| Flour, do | 6.1 | 6.0 | 6.0 | 5.1 | 5.1 | 5.0 | 5.9 | 6.1 | 6.1 | 5.6 | 5.4 | 5.1 | 6.1 | 6.0 | 6.0 |
| Corn meal, do | 4.1 | 4.2 | 4.1 | 5.5 | 5.8 | 5.8 | 4.2 | 4.2 | 4.2 | 5.4 | 5.3 | 5.3 | 3.8 | 3.8 | 3.9 |
| Rolled oats, do | 10.3 | 10.3 | 10.6 | 10.0 | 10.0 | 9.9 | 8.5 | 8.6 | 9.1 | 8.9 | 8.7 | 9.0 | 8.8 | 8.8 | 9.0 |
| Corn flakes, 8-oz. package | 10.3 | 9.8 | 9.8 | 9.4 | 9.4 | 9.4 | 9.7 | 9.5 | 9.5 | 9.6 | 9.3 | 9.1 | 9.8 | 9.8 | 9.8 |
| Wheat cereal, 28-oz. package | 26.8 | 26.8 | 27.0 | 24.9 | 25.0 | 25.0 | 24.8 | 27.4 | 27.1 | 25.9 | 25.6 | 25.7 | 25.8 | 25.8 | 25.8 |
| Macaroni, pound | 20.8 | 20.5 | 20.2 | 18.5 | 18.2 | 18.1 | 18.9 | 18.9 | 23.6 | 23.1 | 23.2 | 19.4 | 19.7 | 19.5 | |
| Rice, do | 8.4 | 8.0 | 7.9 | 10.0 | 10.1 | 9.9 | 11.4 | 10.9 | 11.2 | 9.9 | 9.1 | 8.9 | 8.7 | 7.9 | 8.2 |
| Beans, navy, do | 9.3 | 13.0 | 12.7 | 9.6 | 11.8 | 11.9 | 8.4 | 13.3 | 12.8 | 9.2 | 12.9 | 12.4 | 9.3 | 12.5 | 12.1 |
| Potatoes, do | 3.6 | 2.4 | 2.6 | 3.0 | 2.6 | 2.6 | 3.0 | 1.7 | 2.2 | 2.6 | 1.9 | 1.7 | 3.3 | 2.9 | 2.9 |
| Onions, do | 6.0 | 6.3 | 6.7 | 4.7 | 4.7 | 4.9 | 5.5 | 5.1 | 5.7 | 4.5 | 5.8 | 6.7 | 4.8 | 5.0 | 5.7 |
| Cabbage, do | 4.8 | 4.4 | 4.6 | 4.2 | 4.5 | 6.1 | 5.0 | 3.6 | 4.4 | 3.1 | 5.0 | 4.2 | 3.7 | 3.6 | 3.8 |
| Beans, baked, No. 2 can | 10.5 | 11.1 | 11.2 | 10.8 | 11.6 | 11.6 | 10.2 | 11.0 | 10.9 | 13.3 | 13.4 | 13.4 | 11.0 | 11.2 | 11.4 |
| Corn, canned, do | 16.3 | 15.8 | 15.9 | 15.6 | 15.8 | 15.6 | 15.1 | 15.3 | 15.3 | 16.1 | 16.4 | 16.0 | 14.6 | 14.4 | 14.5 |
| Peas, canned, do | 17.1 | 16.8 | 17.2 | 16.4 | 17.3 | 17.1 | 14.8 | 15.5 | 15.5 | 17.7 | 17.8 | 17.6 | 15.6 | 15.3 | 15.1 |
| Tomatoes, canned, No. 2 can | 10.2 | 10.0 | 10.1 | 14.7 | 14.8 | 15.0 | 10.8 | 10.5 | 10.9 | 12.3 | 11.7 | 12.1 | 9.9 | 9.8 | 9.9 |
| Sugar, pound | 7.7 | 7.6 | 7.5 | 7.0 | 6.8 | 6.6 | 7.5 | 7.4 | 7.2 | 7.5 | 7.2 | 6.9 | 6.9 | 7.1 | 7.0 |
| Tea, do | 104.5 | 105.3 | 104.9 | 74.4 | 75.9 | 74.9 | 90.0 | 92.3 | 91.9 | 64.2 | 65.1 | 64.9 | 98.4 | 97.6 | 96.9 |
| Coffee, do | 52.3 | 54.3 | 54.6 | 51.2 | 54.0 | 53.9 | 46.5 | 51.5 | 50.5 | 47.8 | 51.1 | 51.0 | 47.3 | 49.8 | 49.6 |
| Prunes, do | 15.5 | 15.0 | 14.9 | 12.6 | 12.5 | 12.8 | 15.7 | 16.3 | 15.5 | 14.0 | 12.9 | 13.0 | 14.0 | 12.9 | 13.4 |
| Raisins, do | 15.0 | 14.2 | 14.0 | 12.4 | 10.6 | 10.2 | 14.5 | 14.0 | 13.0 | 13.6 | 13.0 | 12.1 | 14.7 | 14.5 | 13.7 |
| Bananas, dozen | 8.5 | 8.7 | 8.9 | 9.9 | 8.9 | 9.5 | 10.2 | 9.4 | 10.2 | 9.3 | 8.8 | 8.9 | 8.6 | 8.7 | 9.1 |
| Oranges, do | 54.3 | 59.9 | 58.4 | 59.5 | 53.1 | 55.4 | 48.6 | 57.1 | 54.0 | 56.1 | 66.4 | 70.9 | 45.4 | 61.7 | 56.0 |

¹ The steak for which prices are quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

² Per pound.

³ No. 2½ can.

TABLE 4.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES OCTOBER 15, 1927, AND SEPTEMBER 15 AND OCTOBER 15, 1928—Continued

| Article | Milwaukee, Wis. | | | Minneapolis, Minn. | | | Mobile, Ala. | | | Newark, N. J. | | | New Haven, Conn. | | |
|--|-----------------|-----------|-----------|--------------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|------------------|-----------|-----------|
| | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | |
| | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 |
| Sirloin steak.....pound.. | Cts. 41.6 | Cts. 49.7 | Cts. 47.5 | Cts. 35.8 | Cts. 44.3 | Cts. 43.0 | Cts. 36.4 | Cts. 41.7 | Cts. 43.3 | Cts. 48.8 | Cts. 58.5 | Cts. 55.6 | Cts. 58.7 | Cts. 67.7 | Cts. 65.9 |
| Round steak.....do..... | 36.3 | 44.6 | 42.4 | 31.7 | 38.8 | 38.3 | 35.5 | 41.1 | 41.7 | 46.3 | 55.5 | 52.3 | 47.3 | 55.6 | 54.5 |
| Rib roast.....do..... | 29.4 | 35.0 | 34.5 | 27.3 | 33.3 | 32.4 | 30.5 | 32.8 | 33.3 | 38.7 | 44.2 | 42.0 | 38.4 | 43.0 | 42.9 |
| Chuck roast.....do..... | 26.2 | 32.6 | 32.5 | 23.7 | 29.2 | 28.5 | 24.1 | 28.9 | 27.8 | 27.5 | 36.0 | 34.2 | 29.0 | 35.8 | 35.6 |
| Plate beef.....do..... | 15.8 | 20.9 | 21.2 | 14.0 | 18.3 | 18.5 | 18.2 | 21.4 | 22.6 | 15.0 | 20.6 | 19.9 | 15.9 | 20.1 | 20.0 |
| Pork chops.....do..... | 41.0 | 45.5 | 34.8 | 39.4 | 43.7 | 37.8 | 40.0 | 38.3 | 36.1 | 42.1 | 47.8 | 40.2 | 44.2 | 47.0 | 38.0 |
| Bacon, sliced.....do..... | 46.8 | 46.8 | 46.2 | 47.2 | 47.6 | 48.8 | 45.8 | 40.8 | 42.3 | 45.8 | 44.5 | 44.0 | 45.7 | 47.6 | 46.9 |
| Ham, sliced.....do..... | 47.4 | 51.3 | 51.2 | 50.8 | 52.9 | 53.8 | 52.1 | 52.3 | 51.8 | 54.3 | 58.6 | 57.7 | 57.8 | 62.0 | 62.0 |
| Lamb, leg of.....do..... | 37.7 | 41.0 | 39.6 | 34.1 | 36.2 | 34.0 | 41.4 | 41.7 | 41.7 | 38.3 | 41.8 | 38.9 | 39.2 | 41.5 | 39.5 |
| Hens.....do..... | 30.1 | 36.0 | 34.9 | 30.8 | 34.8 | 34.0 | 35.0 | 32.4 | 33.0 | 37.5 | 39.3 | 39.3 | 40.5 | 42.6 | 43.1 |
| Salmon, canned, red.....pound.. | 33.8 | 32.8 | 32.7 | 36.6 | 36.6 | 36.4 | 34.5 | 34.9 | 33.1 | 32.3 | 31.4 | 30.9 | 33.6 | 34.4 | 34.1 |
| Milk, fresh.....quart..... | 11.0 | 11.0 | 11.0 | 12.0 | 12.0 | 12.0 | 17.8 | 18.0 | 18.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 |
| Milk, evaporated.....16-oz. can.. | 11.3 | 10.2 | 11.2 | 11.8 | 11.6 | 11.7 | 11.7 | 11.3 | 11.3 | 11.1 | 10.8 | 10.8 | 12.1 | 11.9 | 11.9 |
| Butter.....pound..... | 53.8 | 55.8 | 54.5 | 52.8 | 54.8 | 53.7 | 54.9 | 56.2 | 52.3 | 59.6 | 59.3 | 59.3 | 54.9 | 56.8 | 58.0 |
| Oleomargarine (all butter substitutes).....pound.. | 27.1 | 26.5 | 26.7 | 25.7 | 25.7 | 25.8 | 29.1 | 29.9 | 30.1 | 30.6 | 29.3 | 29.6 | 29.1 | 28.8 | 29.1 |
| Cheese.....do..... | 37.2 | 37.6 | 38.1 | 36.7 | 37.5 | 37.4 | 38.0 | 36.8 | 36.6 | 40.4 | 40.3 | 41.1 | 39.6 | 40.9 | 41.5 |
| Lard.....do..... | 19.7 | 19.6 | 19.6 | 18.3 | 19.6 | 19.8 | 19.8 | 18.7 | 18.8 | 19.8 | 18.8 | 19.6 | 18.8 | 19.5 | 19.9 |
| Vegetable lard substitute.....pound.. | 26.7 | 26.4 | 26.4 | 27.0 | 27.0 | 26.8 | 21.0 | 20.9 | 20.1 | 25.5 | 25.4 | 25.3 | 25.6 | 25.9 | 26.0 |
| Eggs, strictly fresh.....dozen..... | 51.4 | 43.7 | 46.8 | 44.8 | 40.1 | 41.4 | 47.6 | 44.4 | 50.6 | 69.2 | 60.5 | 65.9 | 73.2 | 70.6 | 75.4 |
| Eggs, storage.....do..... | 37.0 | 39.1 | 35.0 | 34.3 | 34.3 | 41.3 | 43.7 | 43.3 | 43.7 | 43.3 | 45.3 | 49.6 | 48.0 | 48.0 | 48.0 |
| Bread.....pound..... | 9.1 | 8.7 | 8.7 | 8.9 | 8.9 | 8.9 | 10.1 | 10.1 | 10.1 | 9.5 | 9.1 | 9.1 | 9.2 | 9.0 | 9.0 |
| Flour.....do..... | 4.9 | 4.6 | 4.5 | 5.2 | 4.8 | 4.8 | 6.1 | 6.3 | 6.1 | 5.3 | 4.9 | 5.0 | 5.5 | 5.4 | 5.3 |
| Corn meal.....do..... | 5.6 | 5.8 | 5.9 | 5.4 | 5.5 | 5.7 | 4.1 | 4.1 | 4.1 | 6.8 | 6.9 | 6.9 | 6.9 | 6.9 | 6.9 |
| Rollod oats.....do..... | 8.4 | 8.3 | 8.2 | 8.1 | 7.8 | 7.9 | 8.5 | 8.4 | 8.4 | 8.3 | 8.3 | 8.3 | 9.4 | 9.3 | 9.3 |
| Corn flakes.....8-oz. package.. | 9.2 | 9.3 | 9.3 | 9.8 | 9.9 | 9.6 | 9.5 | 9.4 | 9.3 | 8.6 | 8.6 | 8.8 | 10.1 | 10.0 | 10.1 |
| Wheat cereal.....28-oz. package.. | 24.7 | 24.7 | 24.6 | 25.6 | 25.4 | 25.4 | 24.9 | 25.0 | 25.0 | 24.2 | 24.8 | 24.6 | 24.9 | 24.6 | 24.6 |
| Macaroni.....pound..... | 17.5 | 17.9 | 17.8 | 18.8 | 17.7 | 17.7 | 20.7 | 21.2 | 21.3 | 21.4 | 21.2 | 21.4 | 22.3 | 22.6 | 22.4 |
| Rice.....do..... | 10.4 | 10.1 | 10.2 | 10.5 | 9.5 | 9.8 | 9.6 | 9.0 | 8.6 | 10.4 | 9.7 | 9.9 | 10.5 | 10.4 | 10.4 |
| Beans, navy.....do..... | 8.7 | 13.5 | 13.0 | 9.8 | 13.6 | 13.3 | 8.8 | 11.6 | 11.8 | 9.8 | 12.7 | 13.0 | 9.5 | 12.0 | 11.8 |
| Potatoes.....do..... | 2.6 | 1.7 | 1.7 | 1.9 | 1.0 | 1.1 | 3.7 | 3.0 | 3.0 | 3.3 | 2.3 | 2.2 | 3.2 | 2.2 | 2.2 |
| Onions.....do..... | 4.5 | 5.3 | 5.0 | 4.7 | 5.2 | 5.3 | 4.9 | 5.5 | 6.0 | 4.9 | 6.9 | 7.3 | 5.5 | 6.6 | 6.9 |
| Cabbage.....do..... | 3.0 | 3.2 | 3.3 | 2.9 | 2.1 | 2.4 | 4.7 | 4.2 | 4.4 | 4.5 | 5.0 | 5.4 | 4.5 | 5.2 | 5.2 |
| Beans, baked.....No. 2 can..... | 10.9 | 11.5 | 11.5 | 12.4 | 12.2 | 12.4 | 10.3 | 10.5 | 10.6 | 10.7 | 10.6 | 10.9 | 11.6 | 11.9 | 12.4 |
| Corn, canned.....do..... | 15.6 | 16.2 | 16.2 | 14.1 | 14.5 | 15.3 | 15.8 | 15.8 | 14.7 | 15.3 | 17.1 | 17.1 | 18.3 | 18.0 | 18.2 |
| Peas, canned.....do..... | 15.5 | 15.9 | 15.7 | 14.5 | 14.9 | 15.0 | 15.4 | 15.9 | 15.9 | 17.8 | 17.3 | 16.9 | 18.4 | 21.6 | 21.5 |
| Tomatoes, canned.....No. 2 can..... | 13.3 | 13.0 | 13.2 | 13.2 | 12.9 | 13.3 | 10.3 | 10.1 | 10.3 | 10.6 | 10.5 | 10.8 | 13.5 | 13.0 | 13.4 |
| Sugar.....pound..... | 6.9 | 6.8 | 6.7 | 7.3 | 7.1 | 7.0 | 7.1 | 7.0 | 6.8 | 6.7 | 6.5 | 6.5 | 7.1 | 6.9 | 6.8 |
| Tea.....do..... | 70.0 | 68.8 | 68.8 | 60.6 | 61.5 | 67.6 | 80.3 | 81.1 | 78.6 | 61.8 | 59.0 | 59.0 | 60.3 | 60.8 | 60.3 |
| Coffee.....do..... | 42.7 | 45.3 | 46.0 | 50.1 | 53.2 | 53.8 | 47.7 | 48.6 | 47.9 | 46.8 | 49.2 | 49.2 | 48.8 | 51.5 | 51.9 |
| Prunes.....do..... | 14.3 | 13.8 | 14.2 | 15.0 | 13.9 | 14.6 | 15.7 | 15.1 | 12.9 | 14.2 | 12.9 | 13.0 | 14.5 | 13.7 | 13.4 |
| Raisins.....do..... | 14.5 | 13.2 | 13.2 | 14.4 | 13.1 | 12.7 | 14.1 | 13.6 | 11.2 | 14.3 | 13.0 | 12.1 | 13.7 | 13.5 | 13.3 |
| Bananas.....dozen..... | 9.5 | 9.2 | 9.4 | 11.3 | 9.6 | 10.3 | 24.4 | 23.6 | 25.0 | 37.5 | 37.0 | 37.0 | 33.4 | 33.5 | 33.8 |
| Oranges.....do..... | 53.7 | 66.3 | 65.5 | 58.4 | 67.7 | 64.3 | 47.5 | 55.2 | 56.5 | 65.8 | 72.5 | 73.3 | 67.3 | 73.1 | 71.6 |

* Per pound.

TABLE 4.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES OCTOBER 15, 1927, AND SEPTEMBER 15 AND OCTOBER 15, 1928—Continued

| Article | New Orleans, La. | | | New York, N. Y. | | | Norfolk, Va. | | | Omaha, Nebr. | | | Peoria, Ill. | | |
|---|------------------|-----------|-----------|-----------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|---------------|-----------|-----------|
| | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | |
| | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 |
| Sirloin steak...pound... | Cts. 37.2 | Cts. 44.7 | Cts. 44.6 | Cts. 49.9 | Cts. 57.1 | Cts. 55.4 | Cts. 42.5 | Cts. 49.2 | Cts. 48.5 | Cts. 39.8 | Cts. 50.4 | Cts. 49.2 | Cts. 35.7 | Cts. 42.1 | Cts. 40.3 |
| Round steak...do..... | 32.8 | 38.9 | 39.1 | 46.8 | 53.6 | 51.8 | 37.0 | 44.4 | 42.3 | 37.4 | 47.9 | 45.3 | 34.4 | 41.3 | 39.4 |
| Rib roast...do..... | 31.4 | 36.3 | 35.9 | 41.9 | 46.4 | 46.1 | 32.0 | 40.0 | 38.3 | 27.4 | 33.9 | 33.9 | 25.4 | 32.5 | 31.8 |
| Chuck roast...do..... | 22.1 | 26.3 | 26.3 | 28.1 | 32.1 | 31.4 | 23.3 | 28.3 | 28.3 | 23.5 | 30.9 | 30.4 | 22.5 | 29.6 | 28.4 |
| Plate beef...do..... | 18.2 | 21.3 | 21.5 | 22.0 | 26.0 | 26.0 | 15.9 | 19.8 | 20.9 | 13.0 | 18.7 | 18.4 | 15.7 | 19.6 | 19.3 |
| Pork chops...do..... | 40.4 | 41.6 | 37.7 | 45.2 | 47.4 | 41.0 | 38.6 | 37.2 | 35.2 | 41.1 | 42.6 | 37.1 | 37.1 | 39.4 | 34.5 |
| Bacon, sliced...do..... | 45.9 | 43.8 | 44.1 | 48.9 | 47.3 | 47.7 | 45.1 | 42.5 | 42.1 | 49.1 | 47.7 | 48.3 | 48.8 | 45.0 | 45.0 |
| Ham, sliced...do..... | 50.9 | 52.8 | 51.4 | 58.4 | 60.4 | 59.9 | 48.3 | 47.0 | 47.5 | 50.3 | 55.1 | 55.2 | 54.2 | 52.5 | 51.3 |
| Lamb, leg of...do..... | 38.5 | 40.6 | 38.4 | 37.5 | 40.4 | 38.5 | 42.2 | 44.7 | 41.2 | 38.1 | 39.0 | 37.8 | 39.4 | 42.9 | 40.0 |
| Hens...do..... | 36.5 | 37.1 | 37.7 | 38.7 | 39.8 | 39.7 | 35.7 | 36.8 | 37.5 | 29.9 | 32.4 | 32.1 | 32.5 | 32.9 | 34.3 |
| Salmon, canned, red...pound... | 37.9 | 36.1 | 34.6 | 33.5 | 31.6 | 31.0 | 36.5 | 36.2 | 34.9 | 34.9 | 35.3 | 34.8 | 34.0 | 35.1 | 33.8 |
| Milk, fresh...quart... | 14.0 | 14.0 | 14.0 | 16.0 | 16.0 | 16.0 | 18.0 | 18.0 | 18.0 | 11.3 | 11.3 | 11.3 | 13.0 | 13.0 | 13.0 |
| Milk, evaporated...16-oz. can... | 11.1 | 10.8 | 10.9 | 11.1 | 10.9 | 10.9 | 11.8 | 11.4 | 11.4 | 11.7 | 11.4 | 11.4 | 11.3 | 11.1 | 11.3 |
| Butter...pound... | 55.6 | 56.9 | 57.6 | 58.4 | 57.7 | 57.6 | 57.8 | 58.9 | 59.7 | 51.0 | 53.3 | 53.5 | 51.8 | 53.8 | 53.9 |
| Oleomargarine (all butter substitutes)...pound... | 29.5 | 28.4 | 28.5 | 27.6 | 28.2 | 28.5 | 26.4 | 25.0 | 26.1 | 26.0 | 25.8 | 26.2 | 28.2 | 27.6 | 28.0 |
| Cheese...do..... | 38.1 | 39.3 | 38.8 | 39.8 | 41.1 | 41.3 | 35.8 | 35.4 | 35.2 | 37.7 | 37.3 | 37.1 | 37.4 | 37.5 | 36.4 |
| Lard...do..... | 19.6 | 18.3 | 18.6 | 20.5 | 20.3 | 20.6 | 19.1 | 18.6 | 19.0 | 20.3 | 20.3 | 20.4 | 18.8 | 19.0 | 19.2 |
| Vegetable lard substitute...pound... | 19.4 | 19.5 | 19.4 | 25.9 | 25.8 | 25.6 | 22.5 | 21.6 | 21.7 | 26.0 | 25.7 | 25.9 | 27.4 | 27.6 | 27.4 |
| Eggs, strictly fresh...dozen... | 45.1 | 43.7 | 46.5 | 74.1 | 62.0 | 68.8 | 60.0 | 51.5 | 57.6 | 42.1 | 39.0 | 40.0 | 44.1 | 40.9 | 44.5 |
| Eggs, storage...do..... | 36.0 | 40.2 | 43.9 | 42.8 | 42.8 | 42.8 | 39.9 | 37.8 | 37.8 | 37.5 | 38.4 | 38.4 | 38.4 | 38.4 | 38.4 |
| Bread...pound... | 8.7 | 8.9 | 8.9 | 9.7 | 8.7 | 8.6 | 9.9 | 9.9 | 9.9 | 9.7 | 9.6 | 9.6 | 10.0 | 10.0 | 10.0 |
| Flour...do..... | 6.6 | 6.9 | 6.8 | 5.5 | 5.0 | 4.9 | 5.6 | 5.5 | 5.5 | 4.6 | 4.4 | 4.4 | 5.3 | 5.0 | 4.7 |
| Corn meal...do..... | 4.2 | 4.2 | 4.3 | 6.6 | 6.8 | 6.6 | 4.7 | 4.7 | 4.7 | 4.9 | 4.7 | 4.5 | 4.8 | 4.8 | 4.9 |
| Rolled oats...do..... | 8.9 | 8.7 | 8.6 | 8.7 | 8.6 | 8.6 | 8.6 | 8.8 | 8.8 | 10.1 | 9.9 | 10.0 | 9.3 | 8.9 | 8.9 |
| Corn flakes...8-oz. package... | 9.7 | 9.5 | 9.5 | 8.8 | 8.8 | 8.9 | 9.7 | 9.7 | 9.7 | 10.1 | 10.1 | 10.1 | 10.2 | 9.6 | 9.6 |
| Wheat cereal...28-oz. package... | 24.6 | 24.6 | 24.9 | 23.9 | 24.4 | 24.5 | 25.0 | 25.4 | 25.3 | 27.8 | 28.2 | 28.2 | 26.3 | 26.2 | 25.8 |
| Macaroni...pound... | 10.6 | 10.6 | 10.8 | 21.1 | 20.8 | 20.9 | 19.1 | 19.0 | 19.0 | 21.3 | 21.2 | 21.2 | 18.6 | 18.8 | 18.8 |
| Rice...do..... | 9.5 | 8.8 | 8.5 | 10.1 | 9.9 | 9.8 | 11.7 | 11.3 | 11.0 | 11.0 | 11.3 | 11.2 | 11.3 | 10.4 | 10.2 |
| Beans, navy...do..... | 8.8 | 11.3 | 11.1 | 10.3 | 13.2 | 13.2 | 8.8 | 12.0 | 11.7 | 10.1 | 13.5 | 13.0 | 9.0 | 13.8 | 12.9 |
| Potatoes...do..... | 4.0 | 2.9 | 3.0 | 3.6 | 2.4 | 2.4 | 3.8 | 1.9 | 2.0 | 2.4 | 1.5 | 1.5 | 2.4 | 1.7 | 1.6 |
| Onions...do..... | 4.5 | 4.8 | 5.0 | 5.0 | 6.5 | 6.3 | 5.4 | 6.9 | 6.8 | 5.1 | 4.9 | 5.3 | 5.9 | 5.9 | 6.3 |
| Cabbage...do..... | 4.4 | 4.7 | 4.6 | 3.6 | 4.6 | 4.7 | 4.5 | 4.5 | 4.7 | 3.2 | 2.5 | 3.0 | 3.2 | 3.0 | 3.4 |
| Beans, baked...No. 2 can... | 10.9 | 10.5 | 10.6 | 11.2 | 11.3 | 11.3 | 9.8 | 10.4 | 10.5 | 12.9 | 13.3 | 13.1 | 11.2 | 10.1 | 10.2 |
| Corn, canned...do..... | 14.4 | 15.4 | 15.4 | 14.3 | 15.4 | 14.9 | 15.4 | 14.6 | 14.7 | 16.4 | 16.2 | 16.0 | 14.8 | 15.0 | 14.5 |
| Peas, canned...do..... | 17.9 | 16.5 | 17.4 | 14.6 | 15.3 | 15.5 | 18.5 | 18.2 | 18.2 | 15.3 | 15.8 | 15.9 | 17.2 | 16.8 | 16.9 |
| Tomatoes, canned...No. 2 can... | 10.7 | 10.4 | 10.4 | 11.2 | 11.2 | 11.7 | 9.9 | 9.9 | 9.9 | 13.1 | 13.1 | 13.4 | 12.5 | 12.2 | 12.3 |
| Sugar...pound... | 6.7 | 6.5 | 6.3 | 6.4 | 6.3 | 6.2 | 6.9 | 6.9 | 6.9 | 7.5 | 7.2 | 7.2 | 8.4 | 7.8 | 7.5 |
| Tea...do..... | 79.3 | 81.8 | 81.9 | 67.1 | 67.8 | 68.0 | 96.4 | 94.7 | 95.6 | 78.4 | 77.2 | 77.2 | 70.9 | 66.0 | 65.6 |
| Coffee...do..... | 35.7 | 35.2 | 35.1 | 45.4 | 45.7 | 45.7 | 47.2 | 50.5 | 50.5 | 53.6 | 53.7 | 53.7 | 46.8 | 49.5 | 49.1 |
| Prunes...do..... | 15.9 | 13.7 | 14.0 | 13.0 | 12.6 | 13.6 | 14.9 | 13.1 | 13.4 | 14.8 | 14.9 | 14.6 | 17.4 | 15.4 | 15.2 |
| Raisins...do..... | 13.6 | 12.1 | 10.6 | 13.9 | 12.9 | 12.1 | 14.2 | 13.7 | 12.3 | 15.0 | 14.0 | 13.7 | 14.5 | 14.0 | 13.1 |
| Bananas...dozen... | 16.7 | 17.1 | 17.9 | 35.4 | 38.3 | 40.2 | 33.5 | 33.0 | 33.6 | 44.8 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 |
| Oranges...do..... | 51.9 | 59.0 | 56.3 | 74.3 | 78.3 | 76.7 | 60.7 | 75.8 | 78.3 | 57.3 | 57.3 | 57.6 | 47.0 | 58.8 | 58.2 |

* Per pound.

TABLE 4.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES OCTOBER 15, 1927, AND SEPTEMBER 15 AND OCTOBER 15, 1928—Continued

| Article | Philadelphia, Pa. | | | Pittsburgh, Pa. | | | Portland, Me. | | | Portland, Oreg. | | |
|--|-------------------|----------|---------|-----------------|----------|---------|---------------|----------|---------|-----------------|----------|---------|
| | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | |
| | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 |
| | | Cts. | Cts. | | Cts. | Cts. | | Cts. | Cts. | | Cts. | Cts. |
| Sirloin steak.....pound.. | 59.1 | 68.1 | 64.4 | 50.2 | 59.2 | 57.2 | 63.9 | 74.4 | 71.4 | 31.1 | 35.9 | 35.8 |
| Round steak.....do..... | 45.4 | 54.4 | 51.3 | 41.9 | 51.0 | 48.5 | 47.8 | 56.6 | 54.4 | 28.9 | 33.9 | 33.8 |
| Rib roast.....do..... | 38.2 | 43.7 | 42.8 | 36.0 | 42.8 | 41.5 | 32.2 | 38.0 | 37.9 | 25.8 | 29.9 | 30.3 |
| Chuck roast.....do..... | 27.8 | 37.3 | 36.8 | 28.3 | 36.1 | 35.6 | 22.6 | 28.4 | 27.4 | 19.4 | 24.4 | 24.6 |
| Plate beef.....do..... | 14.0 | 19.9 | 20.5 | 14.2 | 21.3 | 22.2 | 18.7 | 26.9 | 25.7 | 14.4 | 18.8 | 18.6 |
| Pork chops.....do..... | 45.3 | 50.0 | 40.1 | 46.6 | 49.1 | 40.3 | 44.4 | 45.7 | 41.3 | 38.8 | 41.9 | 36.0 |
| Bacon, sliced.....do..... | 45.6 | 44.3 | 43.7 | 51.4 | 50.1 | 50.2 | 43.1 | 41.8 | 42.2 | 53.6 | 51.3 | 51.3 |
| Ham, sliced.....do..... | 55.7 | 59.9 | 58.7 | 59.0 | 62.4 | 61.1 | 56.5 | 55.5 | 55.4 | 56.0 | 55.9 | 55.9 |
| Lamb, leg of.....do..... | 40.3 | 43.0 | 41.4 | 41.4 | 42.2 | 41.0 | 37.9 | 42.5 | 37.5 | 35.6 | 36.0 | 36.4 |
| Hens.....do..... | 39.9 | 42.0 | 42.6 | 42.6 | 45.9 | 45.7 | 40.8 | 42.2 | 42.4 | 29.7 | 34.0 | 33.8 |
| Salmon, canned, red.....do..... | 34.1 | 30.8 | 30.0 | 32.6 | 31.5 | 30.6 | 35.0 | 32.6 | 31.8 | 35.0 | 31.3 | 32.4 |
| Milk, fresh.....quart.. | 13.0 | 13.0 | 13.0 | 15.0 | 14.0 | 15.0 | 13.8 | 15.0 | 15.0 | 12.0 | 12.0 | 12.0 |
| Milk, evaporated.....16-oz. can.. | 11.8 | 11.5 | 11.5 | 11.1 | 10.8 | 11.0 | 12.5 | 12.5 | 12.3 | 10.7 | 10.0 | 10.0 |
| Butter.....pound.. | 61.0 | 61.2 | 60.7 | 58.7 | 59.7 | 59.1 | 57.2 | 59.2 | 59.5 | 54.8 | 58.9 | 59.1 |
| Oleomargarine (all butter substitutes).....pound.. | 28.6 | 28.8 | 29.0 | 30.8 | 28.5 | 28.8 | 26.4 | 26.6 | 26.6 | 26.4 | 26.2 | 26.3 |
| Cheese.....do..... | 40.4 | 42.8 | 42.8 | 40.6 | 41.7 | 41.8 | 38.6 | 39.8 | 39.4 | 38.3 | 38.5 | 38.0 |
| Lard.....do..... | 18.6 | 19.2 | 19.4 | 19.5 | 19.4 | 19.2 | 18.9 | 18.7 | 19.4 | 21.0 | 19.9 | 19.0 |
| Vegetable lard substitute.....do..... | 25.4 | 24.9 | 25.1 | 27.3 | 27.7 | 27.8 | 26.4 | 26.2 | 26.2 | 28.9 | 28.4 | 28.4 |
| Eggs, strictly fresh.....dozen.. | 62.5 | 54.8 | 60.5 | 58.4 | 52.7 | 54.7 | 68.5 | 67.4 | 68.4 | 52.6 | 47.7 | 53.5 |
| Eggs, storage.....do..... | 47.0 | --- | 45.5 | 40.7 | --- | 45.0 | 44.0 | --- | 49.3 | 43.0 | --- | 42.5 |
| Bread.....pound.. | 9.4 | 8.6 | 8.6 | 9.0 | 9.1 | 9.1 | 10.3 | 10.1 | 10.1 | 9.3 | 9.3 | 9.3 |
| Flour.....do..... | 5.2 | 5.1 | 4.8 | 5.2 | 4.8 | 4.8 | 5.4 | 5.4 | 5.1 | 5.0 | 4.9 | 4.7 |
| Corn meal.....do..... | 4.8 | 5.1 | 5.3 | 5.7 | 6.0 | 6.0 | 5.0 | 5.1 | 5.1 | 5.5 | 5.8 | 5.8 |
| Rolled oats.....do..... | 8.6 | 8.3 | 8.4 | 9.1 | 9.1 | 9.0 | 7.9 | 8.0 | 8.0 | 10.1 | 10.5 | 10.6 |
| Corn flakes.....8-oz. package.. | 9.4 | 8.8 | 8.9 | 9.8 | 9.6 | 9.8 | 9.6 | 9.4 | 9.4 | 9.6 | 9.5 | 9.6 |
| Wheat cereal.....28-oz. package.. | 24.6 | 25.3 | 25.4 | 24.9 | 24.6 | 24.6 | 25.5 | 25.6 | 25.6 | 27.0 | 25.8 | 26.8 |
| Macaroni.....pound.. | 20.7 | 20.5 | 20.2 | 23.4 | 22.7 | 22.6 | 24.1 | 23.2 | 22.7 | 18.3 | 18.6 | 18.5 |
| Rice.....do..... | 11.3 | 10.5 | 10.6 | 11.4 | 11.1 | 11.0 | 12.2 | 11.3 | 11.1 | 10.2 | 10.1 | 9.9 |
| Beans, navy.....do..... | 9.3 | 11.4 | 11.5 | 9.1 | 12.5 | 12.7 | 10.3 | 12.7 | 11.8 | 10.4 | 12.8 | 12.3 |
| Potatoes.....do..... | 3.6 | 2.3 | 2.2 | 3.0 | 2.1 | 2.1 | 2.8 | 2.0 | 1.9 | 2.6 | 2.2 | 2.1 |
| Onions.....do..... | 4.2 | 6.0 | 6.2 | 5.2 | 6.4 | 6.6 | 4.6 | 5.7 | 6.1 | 3.6 | 4.2 | 4.8 |
| Cabbage.....do..... | 3.7 | 5.8 | 5.4 | 4.3 | 4.6 | 4.8 | 2.7 | 4.1 | 3.8 | 3.2 | 4.3 | 3.9 |
| Beans, baked.....No. 2 can.. | 10.9 | 11.4 | 11.2 | 12.9 | 12.8 | 12.7 | 13.8 | 15.2 | 15.0 | 11.8 | 12.3 | 12.3 |
| Corn, canned.....do..... | 14.0 | 15.2 | 15.3 | 16.1 | 16.2 | 16.2 | 14.2 | 14.1 | 14.1 | 18.1 | 17.9 | 17.9 |
| Peas, canned.....do..... | 14.9 | 15.6 | 15.5 | 16.9 | 17.1 | 17.0 | 17.3 | 17.4 | 17.5 | 17.5 | 17.0 | 17.0 |
| Tomatoes, canned.....do..... | 11.7 | 11.7 | 11.6 | 11.6 | 11.8 | 12.1 | 12.7 | 11.7 | 11.5 | 16.5 | 15.6 | 15.6 |
| Sugar.....pound.. | 6.7 | 6.6 | 6.3 | 7.4 | 7.2 | 7.1 | 7.3 | 6.9 | 6.8 | 7.1 | 7.0 | 6.8 |
| Tea.....do..... | 67.3 | 71.4 | 71.2 | 83.0 | 82.1 | 82.1 | 62.2 | 62.2 | 62.2 | 76.4 | 81.1 | 77.2 |
| Coffee.....do..... | 39.2 | 43.9 | 44.3 | 46.2 | 49.0 | 49.3 | 49.3 | 53.1 | 53.4 | 50.7 | 53.3 | 52.9 |
| Prunes.....do..... | 13.3 | 12.2 | 12.4 | 15.8 | 13.8 | 13.8 | 13.8 | 11.9 | 12.1 | 10.3 | 11.1 | 13.4 |
| Raisins.....do..... | 13.6 | 12.3 | 11.4 | 14.4 | 12.8 | 12.5 | 13.0 | 12.1 | 12.1 | 13.5 | 12.2 | 11.6 |
| Bananas.....dozen.. | 30.7 | 28.8 | 29.4 | 39.1 | 36.4 | 38.5 | 11.1 | 10.1 | 10.7 | 12.8 | 10.3 | 10.6 |
| Oranges.....do..... | 61.2 | 66.8 | 68.5 | 59.2 | 67.5 | 69.6 | 71.1 | 77.5 | 74.5 | 60.6 | 59.2 | 61.9 |

¹ The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

² Per pound.

TABLE 4.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES OCTOBER 15, 1927, AND SEPTEMBER 15 AND OCTOBER 15, 1928—Continued

| Article | Providence, R. I. | | | Richmond, Va. | | | Rochester, N. Y. | | | St. Louis, Mo. | | |
|--|----------------------|----------|---------|------------------|----------|---------|---------------------|----------|---------|----------------|----------|---------|
| | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | |
| | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 |
| Sirloin steak.....pound | 75.4 | 84.6 | 82.7 | 40.8 | 49.2 | 48.7 | 43.7 | 52.9 | 50.6 | 40.7 | 47.8 | 47.3 |
| Round steak.....do | 51.4 | 60.1 | 58.9 | 36.0 | 44.2 | 43.7 | 36.9 | 45.4 | 44.3 | 39.4 | 46.9 | 46.0 |
| Rib roast.....do | 40.4 | 44.8 | 45.2 | 32.8 | 36.3 | 37.2 | 32.4 | 37.0 | 36.4 | 32.7 | 36.6 | 37.1 |
| Chuck roast.....do | 31.6 | 36.0 | 35.8 | 23.8 | 29.4 | 29.4 | 27.1 | 33.0 | 32.5 | 23.9 | 29.4 | 29.2 |
| Plate beef.....do | 18.4 | 25.4 | 25.0 | 16.8 | 21.3 | 22.1 | 15.0 | 20.1 | 19.6 | 16.3 | 20.6 | 20.5 |
| Pork chops.....do | 48.7 | 49.6 | 42.6 | 42.4 | 43.3 | 38.3 | 44.6 | 49.9 | 40.8 | 38.7 | 42.7 | 34.6 |
| Bacon, sliced.....do | 42.1 | 43.0 | 43.0 | 44.4 | 41.5 | 40.9 | 41.4 | 41.6 | 41.1 | 43.5 | 42.6 | 41.7 |
| Ham, sliced.....do | 52.7 | 57.1 | 58.2 | 44.6 | 46.7 | 46.5 | 53.9 | 56.8 | 56.2 | 52.1 | 55.0 | 53.8 |
| Lamb, leg of.....do | 39.8 | 41.7 | 39.8 | 43.9 | 44.0 | 44.4 | 38.7 | 40.0 | 38.0 | 37.3 | 37.8 | 37.2 |
| Hens.....do | 40.8 | 42.9 | 42.9 | 33.5 | 35.3 | 35.1 | 39.4 | 41.1 | 41.4 | 31.6 | 35.9 | 34.7 |
| Salmon, canned, red.....do | 33.0 | 32.3 | 32.4 | 35.3 | 34.3 | 32.5 | 35.5 | 33.7 | 33.1 | 36.0 | 32.4 | 32.2 |
| Milk, fresh.....quart | 15.7 | 15.7 | 15.7 | 14.0 | 14.0 | 14.0 | 13.5 | 13.0 | 13.5 | 13.0 | 13.0 | 13.0 |
| Milk, evaporated.....16-oz. can | 12.1 | 11.5 | 11.7 | 12.4 | 12.3 | 12.4 | 11.4 | 11.4 | 11.4 | 10.9 | 10.6 | 10.8 |
| Butter.....pound | 53.9 | 56.9 | 57.2 | 57.6 | 61.0 | 61.6 | 55.1 | 57.0 | 57.5 | 57.6 | 58.9 | 58.9 |
| Oleomargarine (all butter substitutes)pound | 27.5 | 27.2 | 26.7 | 31.3 | 29.9 | 29.8 | 29.6 | 28.3 | 28.4 | 26.6 | 27.1 | 28.4 |
| Cheese.....do | 37.8 | 38.7 | 39.1 | 36.8 | 37.1 | 37.1 | 39.2 | 39.1 | 39.1 | 38.0 | 37.2 | 37.6 |
| Lard.....do | 18.6 | 18.3 | 19.0 | 19.2 | 18.3 | 18.7 | 18.6 | 18.1 | 18.3 | 16.2 | 16.6 | 16.5 |
| Vegetable lard substitute.....do | 26.5 | 26.3 | 26.6 | 25.9 | 25.9 | 25.8 | 24.7 | 26.0 | 26.3 | 25.5 | 25.3 | 25.3 |
| Eggs, strictly fresh.....dozen | 75.0 | 65.4 | 74.5 | 52.6 | 47.1 | 50.1 | 64.0 | 52.4 | 60.5 | 46.1 | 44.3 | 45.5 |
| Eggs, storage.....do | 48.1 | 46.9 | 40.7 | 43.6 | 45.7 | 46.0 | 45.7 | 46.0 | 37.6 | 38.7 | 38.7 | 38.7 |
| Bread.....pound | 9.1 | 9.0 | 9.0 | 9.4 | 8.9 | 8.9 | 9.0 | 8.9 | 9.1 | 9.9 | 9.4 | 9.4 |
| Flour.....do | 5.7 | 5.5 | 5.3 | 5.6 | 5.4 | 5.4 | 5.3 | 5.3 | 5.2 | 5.2 | 5.1 | 5.0 |
| Corn meal.....do | 5.2 | 5.0 | 5.1 | 4.9 | 4.8 | 4.9 | 6.1 | 6.4 | 6.3 | 4.5 | 4.3 | 4.2 |
| Roiled oats.....do | 9.1 | 9.0 | 8.9 | 8.3 | 8.6 | 8.5 | 9.1 | 9.4 | 9.2 | 8.4 | 8.1 | 8.1 |
| Corn flakes.....8-oz. package | 9.5 | 9.4 | 9.3 | 9.7 | 9.6 | 9.6 | 9.6 | 9.4 | 9.3 | 9.0 | 8.7 | 9.0 |
| Wheat cereal.....28-oz. package | 25.2 | 24.8 | 24.8 | 25.9 | 26.0 | 26.0 | 25.0 | 25.6 | 25.3 | 24.7 | 24.7 | 24.6 |
| Macaroni.....pound | 23.2 | 23.1 | 22.5 | 20.9 | 20.0 | 20.2 | 20.3 | 20.6 | 20.4 | 20.1 | 19.5 | 19.8 |
| Rice.....do | 10.9 | 10.4 | 10.2 | 11.6 | 11.5 | 11.4 | 10.4 | 9.4 | 9.0 | 10.3 | 9.8 | 9.8 |
| Beans, navy.....do | 10.0 | 13.0 | 13.1 | 9.8 | 12.7 | 13.0 | 9.5 | 13.3 | 12.4 | 8.7 | 12.5 | 12.3 |
| Potatoes.....do | 3.0 | 2.1 | 1.9 | 3.4 | 2.4 | 2.3 | 2.5 | 2.0 | 1.8 | 3.1 | 1.7 | 1.9 |
| Onions.....do | 4.6 | 5.8 | 6.4 | 6.1 | 6.9 | 7.2 | 4.5 | 5.5 | 5.6 | 5.5 | 5.6 | 5.6 |
| Cabbage.....do | 3.9 | 4.8 | 5.3 | 3.8 | 4.6 | 4.9 | 2.2 | 4.0 | 3.3 | 3.8 | 3.4 | 3.4 |
| Beans, baked.....No. 2 can | 11.1 | 11.2 | 11.1 | 10.1 | 10.5 | 11.1 | 10.2 | 10.4 | 10.4 | 10.5 | 10.3 | 10.4 |
| Corn, canned.....do | 16.9 | 17.3 | 17.4 | 15.1 | 15.1 | 15.3 | 16.6 | 16.2 | 16.4 | 15.6 | 15.3 | 15.3 |
| Peas, canned.....do | 18.6 | 18.5 | 18.3 | 18.6 | 17.4 | 17.9 | 17.7 | 17.2 | 17.7 | 15.5 | 14.5 | 14.6 |
| Tomatoes, canned.....do | 13.4 | 12.8 | 12.9 | 10.5 | 10.6 | 10.7 | 13.4 | 13.8 | 14.4 | 11.2 | 10.4 | 10.7 |
| Sugar.....pound | 6.9 | 6.8 | 6.6 | 7.1 | 7.0 | 6.9 | 6.7 | 6.4 | 6.3 | 7.1 | 7.1 | 6.8 |
| Tea.....do | 60.6 | 60.1 | 60.7 | 91.4 | 91.3 | 91.3 | 69.7 | 70.9 | 72.8 | 75.9 | 74.8 | 74.6 |
| Coffee.....do | 48.9 | 52.2 | 52.7 | 46.0 | 48.1 | 48.0 | 44.8 | 48.8 | 49.1 | 45.4 | 47.1 | 46.8 |
| Prunes.....do | 13.5 | 13.1 | 12.7 | 15.1 | 14.5 | 14.5 | 15.3 | 14.4 | 14.7 | 15.2 | 15.6 | 15.1 |
| Raisins.....do | 14.1 | 13.5 | 13.1 | 13.9 | 12.7 | 12.3 | 14.6 | 13.2 | 12.9 | 14.0 | 12.4 | 11.5 |
| Bananas.....dozen | 31.7 | 31.4 | 32.9 | 38.5 | 36.4 | 35.9 | 36.4 | 35.0 | 27.5 | 30.8 | 31.8 | 32.5 |
| Oranges.....do | 73.3 | 82.9 | 78.4 | 54.2 | 68.5 | 63.8 | 58.2 | 68.8 | 66.6 | 55.2 | 60.2 | 60.3 |

¹ The steak for which prices are here noted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

TABLE 4.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES OCTOBER 15, 1927, AND SEPTEMBER 15 AND OCTOBER 15, 1928—Continued

| Article | St. Paul, Minn. | | | Salt Lake City, Utah | | | San Francisco, Calif. | | | Savannah, Ga. | | |
|--|--------------------|-----------|-----------|-------------------------|-----------|-----------|--------------------------|-----------|-----------|------------------|-----------|-----------|
| | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | |
| | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 |
| Sirloin steak.....pound.. | Cts. 38.6 | Cts. 46.1 | Cts. 42.2 | Cts. 33.1 | Cts. 39.5 | Cts. 39.3 | Cts. 33.8 | Cts. 40.4 | Cts. 41.2 | Cts. 35.0 | Cts. 41.4 | Cts. 40.5 |
| Round steak.....do..... | 33.9 | 39.3 | 37.4 | 30.5 | 37.9 | 38.0 | 31.0 | 38.8 | 39.9 | 28.8 | 35.0 | 34.1 |
| Rib roast.....do..... | 31.1 | 36.8 | 33.7 | 25.7 | 30.7 | 30.1 | 31.2 | 36.4 | 37.4 | 27.5 | 32.3 | 32.3 |
| Chuck roast.....do..... | 25.1 | 30.2 | 28.4 | 20.2 | 25.8 | 26.3 | 20.3 | 25.0 | 26.5 | 18.0 | 23.8 | 23.1 |
| Plate beef.....do..... | 15.1 | 18.6 | 17.9 | 14.5 | 18.8 | 19.0 | 15.9 | 20.3 | 21.3 | 15.8 | 19.2 | 18.8 |
| Pork chops.....do..... | 38.4 | 42.5 | 33.1 | 39.9 | 45.0 | 40.2 | 44.3 | 45.0 | 44.4 | 33.5 | 32.0 | 31.8 |
| Bacon, sliced.....do..... | 45.9 | 45.4 | 44.9 | 46.9 | 45.6 | 45.2 | 57.1 | 55.8 | 56.9 | 41.6 | 41.2 | 40.6 |
| Ham, sliced.....do..... | 47.1 | 51.6 | 50.6 | 57.1 | 57.7 | 57.7 | 63.8 | 63.3 | 63.5 | 45.0 | 44.5 | 46.0 |
| Lamb, leg of.....do..... | 32.7 | 32.9 | 31.6 | 35.3 | 38.1 | 37.4 | 38.7 | 39.3 | 40.3 | 39.0 | 40.8 | 40.8 |
| Hens.....do..... | 28.8 | 32.3 | 32.2 | 30.4 | 33.7 | 34.6 | 43.3 | 42.2 | 41.6 | 33.0 | 31.0 | 31.1 |
| Salmon, canned, red.....do..... | 37.6 | 37.5 | 37.3 | 35.7 | 33.3 | 33.3 | 33.0 | 29.2 | 29.3 | 33.6 | 33.4 | 33.1 |
| Milk, fresh.....quart.. | 12.0 | 12.0 | 12.0 | 11.0 | 10.0 | 10.0 | 14.0 | 14.0 | 14.0 | 17.0 | 17.0 | 17.0 |
| Milk, evaporated.....16-oz. can.. | 12.0 | 11.7 | 11.9 | 10.6 | 10.2 | 10.2 | 10.4 | 10.0 | 10.0 | 11.5 | 11.3 | 11.4 |
| Butter.....pound.. | 50.9 | 53.3 | 52.1 | 52.1 | 53.8 | 54.5 | 58.0 | 59.0 | 59.4 | 55.4 | 58.7 | 58.9 |
| Oleomargarine (all butter substitutes)pound.. | 25.4 | 24.5 | 24.4 | 27.0 | 25.8 | 25.6 | 25.9 | 25.3 | 25.3 | 31.3 | 30.5 | 30.1 |
| Cheese.....do..... | 36.5 | 36.9 | 36.8 | 30.7 | 30.9 | 31.3 | 39.1 | 40.3 | 40.5 | 36.9 | 35.6 | 35.4 |
| Lard.....do..... | 19.0 | 19.5 | 19.5 | 21.6 | 20.9 | 21.5 | 23.0 | 22.7 | 23.2 | 19.3 | 17.6 | 18.1 |
| Vegetable lard substitute.....do..... | 28.7 | 28.0 | 28.0 | 29.0 | 29.4 | 29.7 | 28.2 | 27.5 | 27.6 | 18.0 | 17.3 | 17.3 |
| Eggs, strictly fresh.....dozen.. | 44.4 | 40.0 | 41.8 | 46.8 | 42.9 | 47.9 | 55.7 | 47.4 | 52.7 | 56.7 | 51.0 | 57.1 |
| Eggs, storage.....do..... | 39.6 | --- | 37.0 | 40.0 | --- | 40.0 | 43.0 | --- | 43.0 | 41.0 | --- | 44.4 |
| Bread.....pound.. | 9.5 | 9.3 | 9.3 | 9.7 | 9.7 | 9.6 | 9.5 | 9.8 | 9.1 | 10.7 | 10.6 | 10.6 |
| Flour.....do..... | 5.1 | 5.0 | 4.8 | 4.1 | 3.7 | 3.6 | 5.6 | 5.4 | 5.4 | 6.5 | 6.5 | 6.5 |
| Corn meal.....do..... | 5.2 | 5.0 | 5.1 | 5.6 | 5.7 | 5.6 | 6.3 | 7.2 | 7.4 | 3.7 | 3.7 | 3.7 |
| Rollod oats.....do..... | 10.2 | 10.2 | 10.1 | 8.8 | 8.7 | 8.8 | 10.1 | 10.2 | 10.1 | 8.9 | 8.6 | 8.5 |
| Corn flakes.....8-oz. package.. | 10.2 | 10.4 | 10.4 | 10.1 | 10.0 | 10.0 | 10.1 | 9.7 | 9.7 | 9.6 | 9.5 | 9.5 |
| Wheat cereal.....28-oz. package.. | 26.5 | 26.3 | 26.3 | 25.7 | 25.5 | 25.5 | 25.2 | 25.2 | 24.3 | 24.3 | 24.3 | 24.3 |
| Macaroni.....pound.. | 18.6 | 18.4 | 18.6 | 19.5 | 19.5 | 19.6 | 16.0 | 16.1 | 16.3 | 18.2 | 17.9 | 18.0 |
| Rice.....do..... | 10.5 | 10.4 | 10.5 | 9.1 | 8.6 | 8.6 | 11.1 | 9.8 | 9.5 | 9.6 | 8.8 | 9.1 |
| Beans, navy.....do..... | 9.8 | 13.9 | 14.0 | 9.1 | 11.4 | 11.2 | 10.1 | 11.6 | 11.1 | 9.5 | 13.2 | 12.8 |
| Potatoes.....do..... | 1.8 | 1.0 | 1.2 | 1.9 | 1.5 | 1.4 | 3.2 | 2.7 | 2.7 | 3.7 | 2.9 | 3.0 |
| Onions.....do..... | 4.5 | 5.0 | 5.2 | 2.6 | 3.6 | 4.0 | 4.3 | 4.3 | 4.4 | 5.9 | 6.7 | 6.9 |
| Cabbage.....do..... | 2.0 | 3.5 | 3.0 | 2.6 | 2.6 | 3.0 | --- | --- | --- | 4.4 | 4.9 | 5.1 |
| Beans, baked.....No. 2 can.. | 13.6 | 13.9 | 13.6 | 12.9 | 12.3 | 12.4 | 13.0 | 12.5 | 12.6 | 12.1 | 11.8 | 11.8 |
| Corn, canned.....do..... | 14.4 | 15.1 | 15.1 | 14.7 | 14.4 | 13.9 | 17.9 | 17.2 | 17.3 | 14.7 | 15.3 | 15.2 |
| Peas, canned.....do..... | 15.4 | 14.9 | 14.9 | 15.7 | 15.2 | 15.1 | 17.9 | 17.8 | 18.0 | 17.0 | 16.0 | 16.6 |
| Tomatoes, canned.....do..... | 14.1 | 14.0 | 14.1 | 14.2 | 13.5 | 13.5 | 15.1 | 14.6 | 14.6 | 9.9 | 9.7 | 10.0 |
| Sugar.....pound.. | 7.3 | 7.4 | 7.2 | 8.1 | 7.6 | 7.4 | 7.0 | 6.7 | 6.5 | 7.0 | 7.0 | 6.7 |
| Tea.....do..... | 65.7 | 67.0 | 67.7 | 86.5 | 86.6 | 86.6 | 72.8 | 71.7 | 71.5 | 82.6 | 78.7 | 79.9 |
| Coffee.....do..... | 52.2 | 53.6 | 53.6 | 54.0 | 54.7 | 54.7 | 52.0 | 53.5 | 53.9 | 45.1 | 46.0 | 46.3 |
| Prunes.....do..... | 15.2 | 13.5 | 14.0 | 14.0 | 13.2 | 13.1 | 12.1 | 11.3 | 11.4 | 13.5 | 13.7 | 13.5 |
| Raisins.....do..... | 15.2 | 13.9 | 14.1 | 13.4 | 12.7 | 12.7 | 12.9 | 11.1 | 10.5 | 14.5 | 12.6 | 12.3 |
| Bananas.....dozen.. | 11.1 | 10.1 | 10.2 | 12.7 | 12.5 | 12.8 | 30.6 | 26.5 | 27.0 | 30.0 | 28.5 | 30.6 |
| Oranges.....do..... | 60.0 | 66.4 | 64.6 | 54.7 | 63.3 | 62.1 | 50.5 | 58.4 | 61.0 | 46.4 | 65.6 | 50.9 |

² Per pound.

⁴ No. 2½ can.

TABLE 4.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES OCTOBER 15, 1927, AND SEPTEMBER 15 AND OCTOBER 15, 1928—Continued

| Article | Scranton, Pa. | | | Seattle, Wash. | | | Springfield, Ill. | | | Washington, D. C. | | |
|--|---------------|-----------|-----------|----------------|-----------|-----------|-------------------|-----------|-----------|-------------------|-----------|-----------|
| | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | | Oct. 15, 1927 | 1928 | |
| | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 | | Sept. 15 | Oct. 15 |
| Sirloin steak.....pound | Cts. 53.3 | Cts. 66.0 | Cts. 64.4 | Cts. 34.8 | Cts. 42.2 | Cts. 42.1 | Cts. 36.7 | Cts. 47.5 | Cts. 43.9 | Cts. 48.7 | Cts. 58.9 | Cts. 56.7 |
| Round steak.....do | 44.5 | 55.5 | 54.1 | 30.6 | 38.0 | 38.0 | 36.1 | 47.1 | 43.9 | 42.7 | 52.8 | 50.0 |
| Rib roast.....do | 38.9 | 46.5 | 46.1 | 23.0 | 34.6 | 34.1 | 24.6 | 33.6 | 32.8 | 34.4 | 41.3 | 41.1 |
| Chuck roast.....do | 29.5 | 38.3 | 38.1 | 20.6 | 26.7 | 27.3 | 22.9 | 31.5 | 29.7 | 25.6 | 34.7 | 34.5 |
| Plate beef.....do | 13.7 | 19.6 | 20.6 | 15.5 | 20.0 | 21.0 | 15.2 | 22.1 | 21.8 | 14.0 | 21.6 | 23.0 |
| Pork chops.....do | 45.4 | 49.5 | 40.2 | 40.2 | 46.5 | 39.4 | 37.1 | 41.2 | 33.1 | 43.8 | 47.8 | 37.3 |
| Bacon, sliced.....do | 48.9 | 48.2 | 48.1 | 57.7 | 56.7 | 56.2 | 45.8 | 45.7 | 45.3 | 44.6 | 43.3 | 43.4 |
| Ham, sliced.....do | 56.5 | 61.3 | 60.5 | 59.3 | 61.5 | 60.9 | 49.6 | 53.6 | 52.3 | 57.1 | 59.7 | 59.7 |
| Lamb, leg of.....do | 45.3 | 47.7 | 44.0 | 35.7 | 37.8 | 37.4 | 40.6 | 42.8 | 39.6 | 39.0 | 42.0 | 40.1 |
| Hens.....do | 43.3 | 44.3 | 44.1 | 31.1 | 35.4 | 34.5 | 32.5 | 35.6 | 33.7 | 39.0 | 41.5 | 41.9 |
| Salmon, canned, red.....do | 35.6 | 34.8 | 34.4 | 35.2 | 34.5 | 33.9 | 36.6 | 36.2 | 34.3 | 34.0 | 32.9 | 30.9 |
| Milk, fresh.....quart | 12.0 | 13.0 | 13.0 | 12.0 | 12.0 | 12.0 | 14.4 | 14.4 | 14.4 | 15.0 | 15.0 | 15.0 |
| Milk, evaporated.....16-oz. can | 11.9 | 12.0 | 12.0 | 10.6 | 10.2 | 10.2 | 11.7 | 11.8 | 12.0 | 11.9 | 11.9 | 11.9 |
| Butter.....pound | 55.8 | 59.0 | 59.5 | 54.4 | 58.4 | 58.9 | 54.1 | 55.2 | 54.5 | 58.6 | 61.4 | 60.8 |
| Oleomargarine (all butter substitutes).....pound | 28.4 | 26.0 | 26.0 | 26.4 | 25.1 | 25.6 | 28.7 | 28.1 | 28.2 | 28.5 | 26.2 | 26.8 |
| Cheese.....do | 36.3 | 39.2 | 39.2 | 35.2 | 35.5 | 35.4 | 38.1 | 38.5 | 37.4 | 41.5 | 40.4 | 40.8 |
| Lard.....do | 19.7 | 19.8 | 20.3 | 21.2 | 20.4 | 20.4 | 18.8 | 19.2 | 19.3 | 18.8 | 19.7 | 19.4 |
| Vegetable lard substitute.....do | 26.0 | 26.0 | 25.6 | 27.1 | 27.5 | 27.2 | 27.5 | 27.7 | 27.8 | 24.2 | 25.2 | 25.1 |
| Eggs, strictly fresh.....dozen | 60.3 | 57.8 | 62.5 | 54.7 | 51.5 | 52.9 | 47.7 | 41.5 | 44.3 | 63.1 | 54.6 | 62.1 |
| Eggs, storage.....do | 46.2 | 48.3 | 45.0 | 44.6 | 44.6 | 38.8 | 46.3 | 46.3 | 46.3 | 46.3 | 50.0 | 50.0 |
| Bread.....pound | 10.6 | 10.1 | 10.0 | 9.7 | 9.6 | 9.6 | 10.3 | 10.2 | 10.2 | 9.1 | 8.9 | 8.9 |
| Flour.....do | 5.8 | 5.7 | 5.6 | 4.7 | 4.7 | 4.7 | 5.5 | 5.1 | 4.8 | 5.8 | 5.7 | 5.6 |
| Corn meal.....do | 7.8 | 7.7 | 7.5 | 5.7 | 5.8 | 5.7 | 4.9 | 4.7 | 4.7 | 5.1 | 5.4 | 5.1 |
| Rollod oats.....do | 9.9 | 9.8 | 9.8 | 8.5 | 8.8 | 8.7 | 10.3 | 9.9 | 10.0 | 9.4 | 9.1 | 9.1 |
| Corn flakes.....8-oz. package | 10.1 | 9.9 | 9.9 | 10.1 | 9.8 | 9.6 | 10.2 | 10.0 | 9.9 | 9.5 | 9.4 | 9.4 |
| Wheat cereal.....20-oz. package | 25.3 | 25.2 | 25.2 | 27.6 | 26.6 | 26.7 | 27.5 | 28.1 | 28.1 | 24.5 | 24.8 | 24.8 |
| Macaroni.....pound | 22.8 | 22.9 | 22.5 | 18.2 | 18.1 | 17.7 | 19.0 | 19.1 | 19.0 | 22.9 | 22.2 | 22.9 |
| Rice.....do | 11.3 | 10.3 | 10.4 | 11.8 | 10.4 | 10.5 | 11.1 | 10.4 | 10.1 | 11.4 | 10.7 | 10.7 |
| Beans, navy.....do | 10.5 | 11.7 | 12.1 | 11.0 | 13.1 | 12.7 | 9.6 | 13.8 | 13.2 | 9.0 | 12.8 | 12.6 |
| Potatoes.....do | 3.1 | 2.0 | 1.9 | 2.0 | 2.2 | 1.8 | 2.8 | 1.6 | 1.7 | 3.5 | 2.4 | 2.5 |
| Onions.....do | 5.1 | 6.0 | 6.1 | 3.5 | 3.9 | 4.8 | 4.8 | 5.3 | 5.8 | 4.7 | 7.2 | 7.2 |
| Cabbage.....do | 3.5 | 4.3 | 4.5 | 3.6 | 3.8 | 3.7 | 3.8 | 3.4 | 3.1 | 4.2 | 4.8 | 4.8 |
| Beans, baked.....No. 2 can | 11.4 | 11.7 | 11.8 | 11.8 | 11.2 | 11.3 | 10.4 | 10.7 | 11.1 | 10.2 | 10.4 | 10.7 |
| Corn, canned.....do | 16.9 | 17.2 | 17.2 | 17.4 | 18.0 | 18.1 | 14.6 | 15.0 | 15.0 | 14.7 | 15.4 | 15.3 |
| Peas, canned.....do | 17.1 | 18.0 | 17.3 | 18.5 | 18.5 | 18.5 | 15.9 | 16.1 | 15.8 | 15.6 | 15.2 | 15.0 |
| Tomatoes, canned.....do | 12.2 | 12.0 | 12.3 | 16.7 | 16.2 | 15.9 | 13.6 | 13.6 | 14.0 | 10.3 | 10.4 | 10.2 |
| Sugar.....pound | 7.1 | 7.0 | 6.8 | 7.2 | 6.9 | 6.7 | 7.8 | 7.6 | 7.5 | 6.9 | 6.8 | 6.6 |
| Tea.....do | 71.2 | 68.5 | 68.3 | 76.0 | 78.6 | 77.6 | 84.6 | 83.8 | 83.5 | 90.7 | 96.3 | 95.8 |
| Coffee.....do | 49.4 | 50.5 | 50.9 | 49.2 | 52.5 | 52.6 | 49.9 | 52.4 | 51.4 | 42.5 | 47.7 | 47.6 |
| Prunes.....do | 14.4 | 13.9 | 14.1 | 12.7 | 12.5 | 12.6 | 15.0 | 15.2 | 14.2 | 15.7 | 14.0 | 14.7 |
| Raisins.....do | 14.5 | 13.3 | 13.1 | 13.6 | 12.8 | 11.7 | 15.0 | 14.3 | 12.8 | 14.2 | 13.3 | 13.5 |
| Bananas.....dozen | 33.3 | 30.8 | 30.8 | 12.9 | 10.4 | 10.7 | 10.4 | 9.1 | 9.7 | 33.6 | 30.5 | 29.3 |
| Oranges.....do | 62.3 | 74.9 | 73.4 | 52.4 | 58.6 | 59.1 | 62.0 | 69.9 | 71.9 | 63.3 | 74.4 | 71.6 |

Per pound.

No. 2½ can.

Comparison of Retail Food Costs in 51 Cities

TABLE 5 shows for 39 cities the percentage of increase or decrease in the retail cost of food³ in October, 1928, compared with the average cost in the year 1913, in October, 1927, and September, 1928. For 12 other cities comparisons are given for the 1-year and the 1-month periods; these cities have been scheduled by the bureau at different dates since 1913. The percentage changes are based on actual retail prices secured each month from retail dealers and on the average family consumption of these articles in each city.⁴

TABLE 5.—PERCENTAGE CHANGE IN THE RETAIL COST OF FOOD IN OCTOBER, 1928, COMPARED WITH THE COST IN SEPTEMBER, 1928, OCTOBER, 1927, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES

| City | Percentage increase, October, 1928, compared with— | | Percent- age decrease October, 1928, compared with Septem- ber, 1928 | City | Percentage, increase October, 1928, compared with— | | Percent- age decrease October, 1928, compared with Septem- ber, 1928 |
|-----------------------|--|------------------|--|-----------------------|--|------------------|--|
| | 1913 | October, 1927 | | | 1913 | October, 1927 | |
| Atlanta..... | 61.0 | ¹ 0.5 | ² 0.8 | Minneapolis..... | 53.0 | 1.0 | 0.4 |
| Baltimore..... | 60.8 | ¹ 1.6 | 2.5 | Mobile..... | | 0.4 | 0.0 |
| Birmingham..... | 62.1 | 0.4 | ² 0.3 | Newark..... | 52.8 | ¹ 0.6 | 0.4 |
| Boston..... | 59.2 | ¹ 0.7 | 1.3 | New Haven..... | 60.8 | 1.4 | ² 0.1 |
| Bridgeport..... | | 0.5 | 0.2 | New Orleans..... | 55.9 | 1.2 | 0.0 |
| Buffalo..... | 62.3 | 1.3 | 0.0 | New York..... | 60.6 | ¹ 2.9 | ² 0.1 |
| Butte..... | | 3.0 | 0.1 | Norfolk..... | | ¹ 0.3 | ² 0.8 |
| Charleston, S. C..... | 59.2 | 2.1 | ² 0.7 | Omaha..... | 49.5 | 0.8 | 0.7 |
| Chicago..... | 66.9 | 0.5 | 1.9 | Peoria..... | | 0.0 | 1.0 |
| Cincinnati..... | 60.6 | 1.6 | 1.1 | Philadelphia..... | 59.6 | ¹ 1.2 | 0.8 |
| Cleveland..... | 54.1 | ¹ 0.9 | 2.1 | Pittsburgh..... | 60.6 | 0.4 | ² 0.2 |
| Columbus..... | | 0.6 | 0.5 | Portland, Me..... | | 1.6 | 1.1 |
| Dallas..... | 57.9 | 1.7 | ² 0.3 | Portland, Oreg..... | 44.4 | 2.3 | ² 0.3 |
| Denver..... | 41.6 | 2.0 | ² 0.6 | Providence..... | 61.2 | 0.9 | ² 0.5 |
| Detroit..... | 62.1 | ¹ 0.8 | 1.7 | Richmond..... | 64.0 | 0.6 | 0.3 |
| Fall River..... | 58.8 | 0.7 | ² 0.7 | Rochester..... | | 1.0 | ² 0.4 |
| Houston..... | | 0.5 | ² 0.3 | St. Louis..... | 57.3 | ¹ 1.1 | 0.7 |
| Indianapolis..... | 51.5 | ² 0.2 | 2.3 | St. Paul..... | | ¹ 0.4 | 1.9 |
| Jacksonville..... | 49.1 | ¹ 0.3 | 0.9 | Salt Lake City..... | 36.1 | 1.5 | ² 0.5 |
| Kansas City..... | 50.5 | ¹ 0.3 | 1.3 | San Francisco..... | 55.5 | 1.3 | ² 0.8 |
| Little Rock..... | 48.8 | 0.2 | ² 0.1 | Savannah..... | | 1.2 | ² 0.8 |
| Los Angeles..... | 49.7 | 3.8 | ² 1.0 | Scranton..... | 64.9 | 1.8 | 0.5 |
| Louisville..... | 55.5 | 1.7 | 0.3 | Seattle..... | 49.2 | 3.6 | 0.9 |
| Manchester..... | 56.1 | 0.9 | 1.6 | Springfield, Ill..... | | ¹ 0.5 | 1.8 |
| Memphis..... | 51.6 | 3.2 | ² 0.3 | Washington..... | 68.6 | 1.9 | 0.8 |
| Milwaukee..... | 57.3 | ¹ 0.4 | 1.5 | | | | |

¹ Decrease.² Increase.

Effort has been made by the bureau each month to have all schedules for each city included in the average prices. For the month of October 99.0 per cent of all the firms supplying retail prices in the 51 cities sent in a report promptly. The following-named 40 cities had a perfect record; that is, every merchant who is cooperating with the bureau sent in his report in time for his prices to be included in the city averages: Atlanta, Baltimore, Birmingham, Bridgeport, Butte, Charleston, S. C., Chicago, Cleveland, Columbus, Denver, Detroit, Fall River, Houston, Indianapolis, Jacksonville, Kansas

³ For list of articles see note 1, p. 217.

⁴ The consumption figures used from January, 1913, to December, 1920, for each article in each city are given in the Labor Review for November, 1918, pp. 94 and 95. The consumption figures which have been used for each month beginning with January, 1921, are given in the Labor Review for March, 1921, p. 20.

City, Little Rock, Los Angeles, Louisville, Manchester, Memphis, Milwaukee, Minneapolis, Mobile, Newark, New Haven, Norfolk, Peoria, Pittsburgh, Portland, Me., Portland, Oreg., Providence, St. Louis, St. Paul, San Francisco, Savannah, Scranton, Seattle, Springfield, Ill., and Washington.

The following summary shows the promptness with which the merchants responded in October, 1928:

RETAIL PRICE REPORTS RECEIVED FOR OCTOBER, 1928

| Item | United States | Geographical division | | | | |
|---|---------------|-----------------------|----------------|---------------|---------------|---------|
| | | North Atlantic | South Atlantic | North Central | South Central | Western |
| Percentage of reports received..... | 99.0 | 98.0 | 99.0 | 99.4 | 99.0 | 99.5 |
| Number of cases in each section from which every report was received..... | 40 | 9 | 7 | 12 | 6 | 6 |

Retail Prices of Coal in the United States ^a

THE following table shows the average retail prices of coal on January 15 and July 15, 1913, October 15, 1927, and September 15 and October 15, 1928, for the United States and for each of the cities from which retail food prices have been obtained. The prices quoted are for coal delivered to consumers, but do not include charges for storing the coal in cellar or coal bin where an extra handling is necessary.

In addition to the prices for Pennsylvania anthracite, prices are shown for Colorado, Arkansas, and New Mexico anthracite in those cities where these coals form any considerable portion of the sales for household use.

The prices shown for bituminous coal are averages of prices of the several kinds sold for household use.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, OCTOBER 15, 1927, AND SEPTEMBER 15 AND OCTOBER 15, 1928

| City, and kind of coal | 1913 | | 1927 | 1928 | |
|---------------------------------|---------|---------|---------|----------|---------|
| | Jan. 15 | July 15 | Oct. 15 | Sept. 15 | Oct. 15 |
| United States: | | | | | |
| Pennsylvania anthracite— | | | | | |
| Stove— | | | | | |
| Average price..... | \$7.99 | \$7.46 | \$15.42 | \$15.21 | \$15.26 |
| Index (1913=100)..... | 103.4 | 96.6 | 199.6 | 196.9 | 197.6 |
| Chestnut— | | | | | |
| Average price..... | \$8.15 | \$7.68 | \$15.07 | \$14.93 | \$14.98 |
| Index (1913=100)..... | 103.0 | 97.0 | 190.4 | 188.78 | 189.3 |
| Bituminous— | | | | | |
| Average price..... | \$5.48 | \$5.39 | \$9.33 | \$8.86 | \$8.99 |
| Index (1913=100)..... | 100.8 | 99.2 | 171.7 | 162. | 164.8 |
| Atlanta, Ga.: | | | | 52 | |
| Bituminous..... | \$5.88 | \$4.83 | \$8.37 | \$7.263 | \$8.02 |
| Baltimore, Md.: | | | | 5 | |
| Pennsylvania anthracite— | | | | | |
| Stove..... | 17.70 | 17.24 | 116.00 | 11.5 | 116.00 |
| Chestnut..... | 17.93 | 17.49 | 115.25 | 11.5 | 115.50 |
| Bituminous..... | | | 8.11 | 7 | 8.00 |

¹ Per ton of 2,240 pounds.

^a Prices of coal were formerly secured semiannually and published in the March and September issues of the Labor Review. Since June, 1920, these prices have been secured and published monthly.

RETAIL PRICES OF COAL

233

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, OCTOBER 15, 1927, AND SEPTEMBER 15 AND OCTOBER 15, 1928—Continued

| City, and kind of coal | 1913 | | 1927 | 1928 | |
|---|---------|---------|---------|----------|---------|
| | Jan. 15 | July 15 | Oct. 15 | Sept. 15 | Oct. 15 |
| Birmingham, Ala.: Bituminous..... | \$4.22 | \$4.01 | \$7.76 | \$7.38 | \$7.56 |
| Boston, Mass.: Pennsylvania anthracite— Stove..... | 8.25 | 7.50 | 16.25 | 15.75 | 16.00 |
| Chestnut..... | 8.25 | 7.75 | 16.00 | 15.50 | 15.75 |
| Bridgeport, Conn.: Pennsylvania anthracite— Stove..... | | | 15.00 | 15.50 | 15.50 |
| Chestnut..... | | | 15.00 | 15.50 | 15.50 |
| Buffalo, N. Y.: Pennsylvania anthracite— Stove..... | 6.75 | 6.54 | 13.99 | 13.92 | 13.93 |
| Chestnut..... | 6.99 | 6.80 | 13.59 | 13.56 | 13.56 |
| Butte, Mont.: Bituminous..... | | | 10.96 | 10.92 | 10.92 |
| Charleston, S. C.: Bituminous..... | 16.75 | 16.75 | 11.00 | 11.00 | 9.67 |
| Chicago, Ill.: Pennsylvania anthracite— Stove..... | 8.00 | 7.80 | 16.94 | 16.50 | 16.75 |
| Chestnut..... | 8.25 | 8.05 | 16.45 | 16.20 | 16.45 |
| Bituminous..... | 4.97 | 4.65 | 9.30 | 8.72 | 9.15 |
| Cincinnati, Ohio: Bituminous..... | 3.50 | 3.38 | 7.10 | 6.47 | 6.47 |
| Cleveland, Ohio: Pennsylvania anthracite— Stove..... | 7.50 | 7.25 | 15.17 | 15.05 | 15.40 |
| Chestnut..... | 7.75 | 7.50 | 14.80 | 14.64 | 15.02 |
| Bituminous..... | 4.14 | 4.14 | 9.02 | 8.44 | 8.80 |
| Columbus, Ohio: Bituminous..... | | | 7.22 | 6.28 | 6.38 |
| Dallas, Tex.: Arkansas anthracite— Egg..... | | | 15.33 | 15.50 | 15.50 |
| Bituminous..... | 8.25 | 7.21 | 12.71 | 13.08 | 13.08 |
| Denver, Colo.: Colorado anthracite— Furnace, 1 and 2 mixed..... | 8.88 | 9.00 | 16.10 | 15.75 | 15.95 |
| Stove, 3 and 5 mixed..... | 8.50 | 8.50 | 16.10 | 15.75 | 15.95 |
| Bituminous..... | 5.25 | 4.88 | 10.42 | 10.57 | 10.57 |
| Detroit, Mich.: Pennsylvania anthracite— Stove..... | 8.00 | 7.45 | 16.00 | 15.90 | 16.00 |
| Chestnut..... | 8.25 | 7.65 | 15.50 | 15.40 | 15.50 |
| Bituminous..... | 5.20 | 5.20 | 9.38 | 8.98 | 9.05 |
| Fall River, Mass.: Pennsylvania anthracite— Stove..... | 8.25 | 7.43 | 16.75 | 16.50 | 16.50 |
| Chestnut..... | 8.25 | 7.61 | 16.25 | 16.25 | 16.25 |
| Houston, Tex.: Bituminous..... | | | 12.10 | 11.60 | 12.00 |
| Indianapolis, Ind.: Bituminous..... | 3.81 | 3.70 | 7.45 | 6.91 | 7.09 |
| Jacksonville, Fla.: Bituminous..... | 7.50 | 7.00 | 14.00 | 12.00 | 13.00 |
| Kansas City, Mo.: Arkansas anthracite— Furnace..... | | | 14.00 | 12.60 | 12.60 |
| Stove No. 4..... | | | 15.33 | 14.17 | 14.17 |
| Bituminous..... | 4.39 | 3.94 | 7.75 | 7.13 | 7.23 |
| Little Rock, Ark.: Arkansas anthracite— Egg..... | | | 13.50 | 13.50 | 13.50 |
| Bituminous..... | 6.00 | 5.33 | 11.80 | 9.65 | 9.80 |
| Los Angeles, Calif.: Bituminous..... | 13.52 | 12.50 | 16.50 | 15.75 | 16.25 |
| Louisville, Ky.: Bituminous..... | 4.20 | 4.00 | 7.50 | 6.78 | 7.01 |
| Manchester, N. H.: Pennsylvania anthracite— Stove..... | 10.00 | 8.50 | 17.50 | 17.25 | 17.25 |
| Chestnut..... | 10.00 | 8.50 | 17.25 | 17.00 | 17.00 |
| Memphis, Tenn.: Bituminous..... | 14.34 | 14.22 | 8.26 | 6.39 | 6.43 |

1 Per ton of 2,240 pounds.

2 Per 10-barrel lot (1,800 pounds).

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, OCTOBER 15, 1927, AND SEPTEMBER 15 AND OCTOBER 15, 1928—Continued

| City, and kind of coal | 1913 | | 1927 | 1928 | |
|--------------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| | Jan. 15 | July 15 | Oct. 15 | Sept. 15 | Oct. 15 |
| Milwaukee, Wis.: | | | | | |
| Pennsylvania anthracite— | | | | | |
| Stove..... | \$8.00 | \$7.85 | \$16.65 | \$16.20 | \$16.20 |
| Chestnut..... | 8.25 | 8.10 | 16.20 | 15.90 | 15.90 |
| Bituminous..... | 6.25 | 5.71 | 9.47 | 9.11 | 9.14 |
| Minneapolis, Minn.: | | | | | |
| Pennsylvania anthracite— | | | | | |
| Stove..... | 9.25 | 9.05 | 18.15 | 18.20 | 18.20 |
| Chestnut..... | 9.50 | 9.30 | 17.70 | 17.90 | 17.90 |
| Bituminous..... | 5.89 | 5.79 | 11.69 | 11.60 | 11.64 |
| Mobile, Ala.: | | | | | |
| Bituminous..... | | | 9.29 | 9.42 | 9.69 |
| Newark, N. J.: | | | | | |
| Pennsylvania anthracite— | | | | | |
| Stove..... | 6.50 | 6.25 | 14.00 | 14.00 | 14.00 |
| Chestnut..... | 6.75 | 6.50 | 13.50 | 13.50 | 13.50 |
| New Haven, Conn.: | | | | | |
| Pennsylvania anthracite— | | | | | |
| Stove..... | 7.50 | 6.25 | 15.05 | 15.00 | 14.90 |
| Chestnut..... | 7.50 | 6.25 | 15.05 | 15.00 | 14.80 |
| New Orleans, La.: | | | | | |
| Bituminous..... | ¹ 6.06 | ² 6.06 | 10.29 | 9.21 | 10.21 |
| New York, N. Y.: | | | | | |
| Pennsylvania anthracite— | | | | | |
| Stove..... | 7.07 | 6.66 | 14.38 | 14.71 | 14.75 |
| Chestnut..... | 7.14 | 6.80 | 14.08 | 14.21 | 14.25 |
| Norfolk, Va.: | | | | | |
| Pennsylvania anthracite— | | | | | |
| Stove..... | | | 15.00 | 14.00 | 14.00 |
| Chestnut..... | | | 15.00 | 14.00 | 14.00 |
| Bituminous..... | | | 9.07 | 8.50 | 8.55 |
| Omaha, Nebr.: | | | | | |
| Bituminous..... | 6.63 | 6.13 | 10.52 | 9.52 | 9.58 |
| Peoria, Ill.: | | | | | |
| Bituminous..... | | | 7.13 | 6.68 | 6.81 |
| Philadelphia, Pa.: | | | | | |
| Pennsylvania anthracite— | | | | | |
| Stove..... | ¹ 7.16 | ¹ 6.89 | ¹ 15.04 | ¹ 14.25 | ¹ 14.29 |
| Chestnut..... | ¹ 7.38 | ¹ 7.14 | ¹ 14.54 | ¹ 13.93 | ¹ 13.96 |
| Pittsburgh, Pa.: | | | | | |
| Pennsylvania anthracite— | | | | | |
| Chestnut..... | ¹ 8.00 | ¹ 7.44 | 14.88 | 14.75 | 14.88 |
| Bituminous..... | ³ 3.16 | ³ 3.18 | 5.76 | 5.12 | 5.31 |
| Portland, Me.: | | | | | |
| Pennsylvania anthracite— | | | | | |
| Stove..... | | | 16.80 | 16.80 | 16.80 |
| Chestnut..... | | | 16.80 | 16.80 | 16.80 |
| Portland, Oreg.: | | | | | |
| Bituminous..... | 9.79 | 9.66 | 13.33 | 12.60 | 13.13 |
| Providence, R. I.: | | | | | |
| Pennsylvania anthracite— | | | | | |
| Stove..... | ⁴ 8.25 | ⁴ 7.50 | ⁴ 16.25 | ⁴ 16.00 | ⁴ 16.00 |
| Chestnut..... | ⁴ 8.25 | ⁴ 7.75 | ⁴ 16.00 | ⁴ 16.00 | ⁴ 16.00 |
| Richmond, Va.: | | | | | |
| Pennsylvania anthracite— | | | | | |
| Stove..... | 8.00 | 7.25 | 15.50 | 14.33 | 14.33 |
| Chestnut..... | 8.00 | 7.25 | 15.50 | 14.33 | 14.33 |
| Bituminous..... | 5.50 | 4.94 | 9.68 | 8.67 | 8.66 |
| Rochester, N. Y.: | | | | | |
| Pennsylvania anthracite— | | | | | |
| Stove..... | | | 14.60 | 14.60 | 14.60 |
| Chestnut..... | | | 14.15 | 14.25 | 14.25 |
| St. Louis, Mo.: | | | | | |
| Pennsylvania anthracite— | | | | | |
| Stove..... | 8.44 | 7.74 | 16.90 | 16.65 | 16.65 |
| Chestnut..... | 8.68 | 7.99 | 16.50 | 16.40 | 16.40 |
| Bituminous..... | 3.36 | 3.04 | 7.41 | 6.06 | 6.11 |
| St. Paul, Minn.: | | | | | |
| Pennsylvania anthracite— | | | | | |
| Stove..... | 9.20 | 9.05 | 18.15 | 18.20 | 18.20 |
| Chestnut..... | 9.45 | 9.30 | 17.70 | 17.90 | 17.90 |
| Bituminous..... | 6.07 | 6.04 | 11.96 | 11.85 | 11.85 |

¹ Per ton of 2,240 pounds.

² Per 10-barrel lot (1,800 pounds).

³ Per 25-bushel lot (1,900 pounds).

⁴ The average price of coal delivered in bin is 50 cents higher than here shown. Practically all coal is delivered in bin.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, OCTOBER 15, 1927, AND SEPTEMBER 15 AND OCTOBER 15, 1928—Continued

| City, and kind of coal | 1913 | | 1927 | 1928 | |
|-------------------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| | Jan. 15 | July 15 | Oct. 15 | Sept. 15 | Oct. 15 |
| Salt Lake City, Utah: | | | | | |
| Colorado anthracite— | | | | | |
| Furnace, 1 and 2 mixed | \$11.00 | \$11.50 | \$18.00 | \$18.00 | \$18.00 |
| Stove, 3 and 5 mixed | 11.00 | 11.50 | 18.00 | 18.00 | 18.00 |
| Bituminous | 5.64 | 5.46 | 8.34 | 8.50 | 8.42 |
| San Francisco, Calif.: | | | | | |
| New Mexico anthracite— | | | | | |
| Cerrillos egg | 17.00 | 17.00 | 25.50 | 26.00 | 26.00 |
| Colorado anthracite— | | | | | |
| Egg | 17.00 | 17.00 | 25.00 | 25.50 | 25.50 |
| Bituminous | 12.00 | 12.00 | 16.63 | 17.13 | 17.13 |
| Savannah, Ga.: | | | | | |
| Bituminous | | | ¹ 11.13 | ¹ 10.62 | ¹ 10.62 |
| Seranton, Pa.: | | | | | |
| Pennsylvania anthracite— | | | | | |
| Stove | 4.25 | 4.31 | 10.75 | 10.53 | 10.53 |
| Chestnut | 4.50 | 4.56 | 10.50 | 10.33 | 10.33 |
| Seattle, Wash.: | | | | | |
| Bituminous | 7.63 | 7.70 | 10.02 | 10.08 | 10.48 |
| Springfield, Ill.: | | | | | |
| Bituminous | | | 4.44 | 4.44 | 4.24 |
| Washington, D. C.: | | | | | |
| Pennsylvania anthracite— | | | | | |
| Stove | ¹ 7.50 | ¹ 7.38 | ¹ 15.51 | ¹ 15.33 | ¹ 15.33 |
| Chestnut | ¹ 7.65 | ¹ 7.53 | ¹ 14.99 | ¹ 14.96 | ¹ 14.96 |
| Bituminous— | | | | | |
| Prepared sizes, low volatile | | | ¹ 11.08 | ¹ 10.92 | ¹ 10.92 |
| Prepared sizes, high volatile | | | ¹ 9.00 | ¹ 8.63 | ¹ 8.63 |
| Run of mine, mixed | | | ¹ 7.88 | ¹ 7.60 | ¹ 7.60 |

¹ Per ton of 2,240 pounds.

² All coal sold in Savannah is weighed by the city. A charge of 10 cents per ton or half ton is made. This additional charge has been included in the above price.

Index Numbers of Wholesale Prices in October, 1928

A REACTION from the recent upward trend of wholesale prices is shown for October by information collected in representative markets by the Bureau of Labor Statistics of the United States Department of Labor. The bureau's weighted index number, computed on prices in the year 1926 as the base and including 550 commodities or price series, stands at 97.8 for October compared with 100.1 for September, a decrease of nearly $2\frac{1}{3}$ per cent. Compared with October, 1927, however, with an index number of 97, an increase of over three-fourths of 1 per cent is shown.

Farm products led in price declines from the previous month, due mainly to marked decreases in cattle, hogs, sheep and lambs, and potatoes. Corn and barley, also, were cheaper, while rye, oats, and most wheat prices were higher. The group as a whole averaged almost 5 per cent lower than in the preceding month. Foods also averaged lower, with weakening prices for butter, meats, lard, flour, and sugar.

Hides and leather products likewise showed an appreciable decrease in average prices, while minor decreases were recorded for the groups of fuel and lighting materials and house-furnishing goods. Negligible price increases took place in the groups of textile products, metals and metal products, building materials, chemicals and drugs, and miscellaneous commodities.

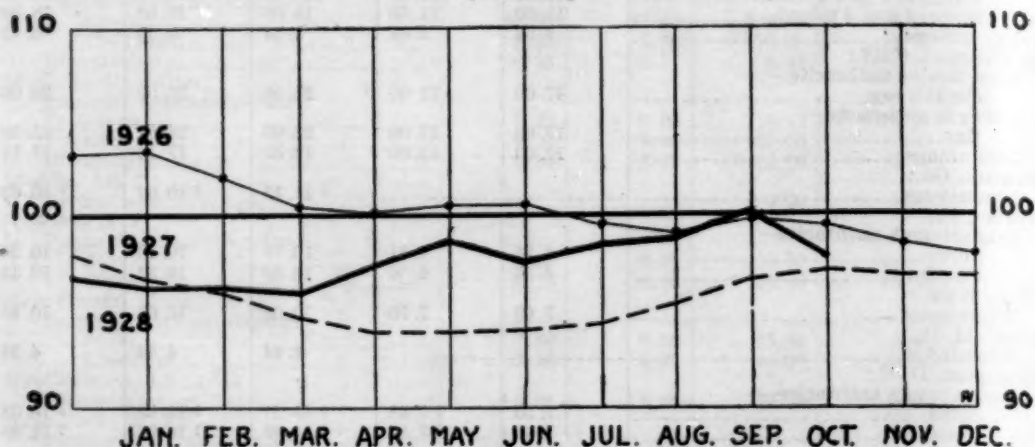
Of the 550 commodities or price series for which comparable information for September and October was collected, increases were

shown in 132 instances and decreases in 142 instances. In 276 instances no change in price was reported.

Comparing prices in October with those of a year ago, as measured by changes in the index numbers, it is seen that appreciable increases took place among foods, hides and leather products, fuel and lighting

TREND OF WHOLESALE PRICES

[1926=100]



materials, metals and metal products, and building materials. On the other hand, farm products, textile products, chemicals and drugs, and housefurnishing goods were somewhat lower in price, while a considerable decrease took place in the group of miscellaneous commodities.

INDEX NUMBERS OF WHOLESALE PRICES BY GROUPS AND SUBGROUPS OF COMMODITIES (1926=100.0)

| Groups and subgroups | October, 1927 | September, 1928 | October, 1928 | Purchasing power of the 1926 dollar in October, 1928 |
|---------------------------------|---------------|-----------------|---------------|--|
| | | | | Cents 102.2 |
| All commodities..... | 97.0 | 100.1 | 97.8 | |
| Farm products..... | 105.0 | 108.8 | 103.5 | 96.6 |
| Grains..... | 99.2 | 97.5 | 96.6 | 103.5 |
| Livestock and poultry..... | 105.5 | 124.0 | 106.4 | 94.0 |
| Other farm products..... | 106.7 | 102.3 | 103.9 | 96.2 |
| Foods..... | 100.0 | 106.9 | 102.3 | 97.8 |
| Butter, cheese, and milk..... | 107.2 | 109.3 | 108.4 | 92.3 |
| Meats..... | 100.0 | 126.5 | 116.4 | 85.9 |
| Other foods..... | 97.2 | 94.0 | 91.2 | 109.6 |
| Hides and leather products..... | 113.0 | 120.7 | 117.5 | 85.1 |
| Hides and skins..... | 128.0 | 141.9 | 129.9 | 77.0 |
| Leather..... | 116.5 | 126.2 | 124.2 | 80.5 |
| Boots and shoes..... | 105.6 | 110.8 | 110.4 | 90.6 |
| Other leather products..... | 108.9 | 109.0 | 109.0 | 91.7 |
| Textile products..... | 98.4 | 95.6 | 96.1 | 104.1 |
| Cotton goods..... | 106.0 | 100.1 | 100.7 | 99.3 |
| Silk and rayon..... | 85.4 | 82.7 | 84.4 | 118.5 |
| Woolen and worsted goods..... | 98.0 | 100.1 | 100.0 | 100.0 |
| Other textile products..... | 95.7 | 86.5 | 86.1 | 116.1 |
| Fuel and lighting..... | 83.8 | 85.1 | 84.9 | 117.8 |
| Anthracite coal..... | 96.9 | 91.2 | 91.2 | 109.6 |
| Bituminous coal..... | 99.6 | 93.2 | 93.9 | 106.5 |
| Coke..... | 93.9 | 84.9 | 85.0 | 117.6 |
| Manufactured gas..... | 97.5 | 94.6 | (1) | |
| Petroleum products..... | 67.5 | 77.1 | 76.3 | 131.1 |
| Metals and metal products..... | 97.1 | 100.5 | 101.0 | 99.0 |
| Iron and steel..... | 94.0 | 94.7 | 95.1 | 105.2 |
| Nonferrous metals..... | 89.9 | 93.8 | 95.8 | 104.4 |
| Agricultural implements..... | 98.9 | 98.8 | 98.8 | 101.2 |
| Automobiles..... | 102.2 | 108.7 | 108.7 | 92.0 |
| Other metal products..... | 100.7 | 96.9 | 96.9 | 103.2 |

¹ Data not yet available.

INDEX NUMBERS OF WHOLESALE PRICES BY GROUPS AND SUBGROUPS OF COMMODITIES (1926=100)—Continued

| Groups and subgroups | October, 1927 | Septem- ber, 1928 | October, 1928 | Purchas- ing power of the 1926 dollar in October, 1928 |
|----------------------------------|------------------|----------------------|------------------|---|
| | | | | <i>Cents</i> |
| Building materials..... | 91.6 | 94.7 | 95.0 | 105.3 |
| Lumber..... | 91.2 | 91.3 | 91.7 | 109.1 |
| Brick..... | 93.3 | 92.4 | 92.4 | 108.2 |
| Cement..... | 96.5 | 94.6 | 94.6 | 105.7 |
| Structural steel..... | 91.9 | 94.5 | 94.5 | 105.8 |
| Paint materials..... | 87.0 | 85.8 | 87.1 | 114.8 |
| Other building materials..... | 91.7 | 104.2 | 104.3 | 95.9 |
| Chemicals and drugs..... | 97.1 | 95.1 | 95.6 | 104.6 |
| Chemicals..... | 101.8 | 101.1 | 101.8 | 98.2 |
| Drugs and pharmaceuticals..... | 86.2 | 70.1 | 70.7 | 141.4 |
| Fertilizer materials..... | 94.1 | 93.5 | 93.8 | 106.6 |
| Fertilizers..... | 92.5 | 97.5 | 97.5 | 102.6 |
| House-furnishing goods..... | 98.5 | 97.2 | 96.5 | 103.6 |
| Furniture..... | 97.0 | 97.5 | 95.5 | 104.7 |
| Furnishings..... | 99.4 | 97.0 | 97.1 | 103.0 |
| Miscellaneous..... | 88.3 | 79.7 | 80.3 | 124.5 |
| Cattle feed..... | 116.7 | 121.1 | 128.2 | 78.0 |
| Paper and pulp..... | 91.6 | 88.8 | 89.0 | 112.4 |
| Rubber..... | 70.5 | 38.1 | 38.8 | 257.7 |
| Automobile tires..... | 74.9 | 61.6 | 60.9 | 164.2 |
| Other miscellaneous..... | 99.9 | 98.0 | 98.5 | 101.5 |
| Raw materials..... | 99.5 | 100.5 | 97.4 | 102.7 |
| Semimanufactured articles..... | 97.6 | 96.9 | 96.9 | 103.2 |
| Finished products..... | 95.5 | 100.5 | 98.5 | 101.5 |
| Nonagricultural commodities..... | 94.8 | 97.8 | 96.4 | 103.7 |

Wholesale Prices in the United States and in Foreign Countries, 1923 to September, 1928

IN THE following table the more important index numbers of wholesale prices in foreign countries and those of the United States Bureau of Labor Statistics have been brought together in order that the trend of prices in the several countries may be compared. The base periods here shown are those appearing in the sources from which the information has been drawn, in most cases being the year 1913. Only general comparisons can be made from these figures, since, in addition to differences in the base periods, there are important differences in the composition of the index numbers themselves.

INDEX NUMBERS OF WHOLESALE PRICES IN THE UNITED STATES AND IN CERTAIN FOREIGN COUNTRIES

| Country.... | United States | Canada | Belgium | Bulgaria | Czechoslovakia | Denmark | Finland | France | Germany | Italy |
|----------------------|--------------------------------------|-------------------------------|--------------------------------|--------------------------------|--|------------------------|------------------------------|----------------------------|----------------------------|--------------------------|
| Computing agency.... | Bureau of Labor Statistics (revised) | Dominion Bureau of Statistics | Ministry of Industry and Labor | Director General of Statistics | Central Bureau of Statistics (revised index) | Statistical Department | Central Bureau of Statistics | General Statistical Bureau | Federal Statistical Bureau | Riccardo Bachi (revised) |
| Base period.. | 1926 | 1913 | April, 1914 | 1913 | July, 1914 | 1913 | 1913 | 1913 | 1913 | 1913 |
| Commodities..... | 550 | ¹ 238 | 128 | 38 | 69 | 118 | 135 | 45 | 400 | 100 |
| Year and month | | | | | | | | | | |
| 1923..... | 100.6 | 153.0 | 497 | 2525 | 977 | | | 419 | | ² 503.9 |
| 1924..... | 98.1 | 155.2 | 573 | 2823 | 997 | | 144 | 488 | 137.3 | ² 497.4 |
| 1925..... | 103.5 | 160.3 | 558 | | 1008 | 210 | 147 | 550 | 141.8 | ² 612.0 |
| 1926..... | 100.0 | 156.2 | 744 | | 954 | 163 | 142 | 703 | 134.4 | ² 618.2 |
| 1927..... | 95.4 | 151.6 | | | 979 | | 145 | 617 | 137.6 | ² 466.7 |
| 1923 | | | | | | | | | | |
| January..... | 102.2 | 151.4 | 434 | 2657 | 991 | | | 387 | | 516.1 |
| April..... | 104.0 | 156.9 | 480 | 2757 | 1012 | | | 415 | | 525.7 |
| July..... | 98.6 | 153.5 | 504 | 2408 | 949 | | | 407 | | 503.9 |
| October..... | 99.6 | 153.1 | 515 | 2263 | 960 | | | 421 | | 499.6 |
| 1924 | | | | | | | | | | |
| January..... | 99.8 | 156.9 | 580 | 2711 | 974 | | | 494 | | 504.4 |
| April..... | 97.6 | 151.1 | 555 | 2798 | 1008 | | | 450 | | 510.3 |
| July..... | 95.9 | 153.9 | 566 | 2737 | 953 | | | 481 | | 497.4 |
| October..... | 98.6 | 157.0 | 555 | 2988 | 990 | | | 497 | | 522.0 |
| 1925 | | | | | | | | | | |
| January..... | 103.5 | 165.5 | 559 | 3275 | 1045 | 243 | | 514 | | 568.2 |
| February..... | 104.5 | 164.7 | 551 | 3309 | 1048 | 240 | | 515 | | 571.1 |
| March..... | 104.8 | 161.6 | 546 | 3272 | 1034 | 236 | | 514 | | 571.2 |
| April..... | 102.4 | 156.5 | 538 | 3244 | 1020 | 230 | | 513 | | 571.1 |
| May..... | 102.1 | 158.8 | 537 | 3177 | 1006 | 227 | | 520 | | 571.2 |
| June..... | 103.4 | 158.6 | 552 | 3225 | 998 | 223 | | 543 | | 590.9 |
| July..... | 104.6 | 158.1 | 559 | 3041 | 1009 | 212 | | 557 | | 612.0 |
| August..... | 104.2 | 158.9 | 567 | 2870 | 993 | 197 | | 557 | | 630.6 |
| September..... | 103.7 | 156.2 | 577 | 2834 | 996 | 186 | | 556 | | 621.5 |
| October..... | 103.6 | 156.0 | 575 | 2823 | 989 | 179 | | 572 | | 617.1 |
| November..... | 104.5 | 161.2 | 569 | 2822 | 977 | 176 | | 605 | | 612.3 |
| December..... | 103.4 | 163.5 | 565 | 2913 | 977 | 176 | | 633 | | 613.8 |
| 1926 | | | | | | | | | | |
| January..... | 103.6 | 163.8 | 560 | 2901 | 966 | 172 | 143 | 634 | 135.8 | 608.0 |
| February..... | 102.1 | 162.0 | 556 | 2899 | 950 | 165 | 142 | 636 | 134.3 | 603.5 |
| March..... | 100.4 | 160.0 | 583 | 2844 | 938 | 158 | 141 | 632 | 133.1 | 592.3 |
| April..... | 100.1 | 160.2 | 621 | 2774 | 923 | 157 | 141 | 650 | 132.7 | 590.0 |
| May..... | 100.5 | 156.8 | 692 | 2938 | 928 | 158 | 140 | 688 | 132.3 | 595.0 |
| June..... | 100.5 | 155.6 | 761 | 2842 | 926 | 157 | 141 | 738 | 131.9 | 604.9 |
| July..... | 99.5 | 155.9 | 876 | 2838 | 948 | 158 | 141 | 836 | 133.1 | 618.2 |
| August..... | 99.0 | 154.0 | 836 | 2759 | 963 | 162 | 143 | 769 | 134.0 | 632.5 |
| September..... | 99.7 | 152.5 | 859 | 2723 | 973 | 162 | 143 | 787 | 134.9 | 622.0 |
| October..... | 99.4 | 151.3 | 856 | 2716 | 972 | 178 | 143 | 751 | 136.2 | 596.7 |
| November..... | 98.4 | 151.4 | 865 | 2739 | 978 | 170 | 143 | 684 | 137.1 | 594.2 |
| December..... | 97.9 | 151.5 | 860 | 2718 | 978 | 158 | 144 | 627 | 137.1 | 573.6 |
| 1927 | | | | | | | | | | |
| January..... | 96.6 | 150.9 | 856 | 2706 | 979 | 157 | 144 | 622 | 135.9 | 558.2 |
| February..... | 95.9 | 150.3 | 854 | 2688 | 975 | 156 | 144 | 632 | 135.6 | 556.8 |
| March..... | 94.5 | 149.1 | 858 | 2649 | 976 | 153 | 143 | 641 | 135.0 | 544.7 |
| April..... | 93.7 | 148.9 | 846 | 2592 | 979 | 152 | 143 | 636 | 134.8 | 521.3 |
| May..... | 93.7 | 152.1 | 848 | 2751 | 988 | 152 | 142 | 628 | 137.1 | 496.2 |
| June..... | 93.8 | 153.5 | 851 | 2823 | 990 | 152 | 144 | 622 | 137.9 | 473.4 |
| July..... | 94.1 | 152.4 | 845 | 2775 | 992 | 152 | 144 | 621 | 137.6 | 466.7 |
| August..... | 95.2 | 152.7 | 850 | 2745 | 983 | 153 | 147 | 618 | 137.9 | 465.4 |
| September..... | 96.5 | 151.3 | 837 | 2736 | 975 | 153 | 148 | 600 | 139.7 | 465.4 |
| October..... | 97.0 | 152.6 | 839 | 2747 | 966 | 154 | 148 | 587 | 139.8 | 467.5 |
| November..... | 96.7 | 152.2 | 838 | 2707 | 967 | 154 | 149 | 594 | 140.1 | 466.0 |
| December..... | 96.8 | 151.8 | 841 | 2739 | 975 | 154 | 148 | 604 | 139.6 | 462.9 |

¹ 236 commodities since April, 1924.² July.

INDEX NUMBERS OF WHOLESALE PRICES IN THE UNITED STATES AND IN CERTAIN FOREIGN COUNTRIES—Continued

| Country | United States | Canada | Belgium | Bulgaria | Czechoslovakia | Denmark | Finland | France | Germany | Italy |
|---------------------|--------------------------------------|-------------------------------|--------------------------------|--------------------------------|--|------------------------|------------------------------|----------------------------|----------------------------|--------------------------|
| Computing agency | Bureau of Labor Statistics (revised) | Dominion Bureau of Statistics | Ministry of Industry and Labor | Director General of Statistics | Central Bureau of Statistics (revised index) | Statistical Department | Central Bureau of Statistics | General Statistical Bureau | Federal Statistical Bureau | Riccardo Bachi (revised) |
| Base period | 1926 | 1913 | April, 1914 | 1913 | July, 1914 | 1913 | 1913 | 1913 | 1913 | 1913 |
| Commodities | 550 | 238 | 128 | 38 | 69 | 118 | 135 | 45 | 400 | 100 |
| Year and month—Con. | | | | | | | | | | |
| 1928 | | | | | | | | | | |
| January | 96.3 | 151.3 | 851 | 2782 | 982 | 153 | 144 | 607 | 138.7 | 463.5 |
| February | 96.4 | 150.8 | 848 | 2826 | 985 | 152 | 143 | 609 | 137.9 | 461.3 |
| March | 96.0 | 152.8 | 848 | 2839 | 978 | 153 | 144 | 623 | 138.5 | 463.9 |
| April | 97.4 | 153.2 | 847 | 2891 | 984 | 154 | 145 | 624 | 139.5 | 464.4 |
| May | 98.6 | 152.9 | 844 | 2906 | 987 | 155 | 143 | 632 | 141.2 | 464.9 |
| June | 97.6 | 150.2 | 844 | 2866 | 986 | 155 | 145 | 626 | 141.3 | 461.7 |
| July | 98.3 | 149.6 | 841 | 2911 | 979 | 155 | 145 | 624 | 141.6 | 453.1 |
| August | 98.9 | 149.1 | 831 | 2790 | 996 | 154 | 147 | 616 | 141.5 | 456.2 |
| September | 100.0 | 149.7 | 830 | | 986 | 151 | 146 | 620 | 139.9 | 457.8 |

| Country | Netherlands | Norway | Spain | Sweden | Switzerland | United Kingdom | Australia | New Zealand | South Africa | Japan | China | India |
|------------------|------------------------------|------------------------------|---------------------------------------|---------------------|--------------------------|----------------|---------------------------------|--|---------------------------------|----------------------|--|----------------------|
| Computing agency | Central Bureau of Statistics | Central Bureau of Statistics | Institute of Geography and Statistics | Chamber of Commerce | Federal Labor Department | Board of Trade | Bureau of Census and Statistics | Census and Statistics Office (revised) | Office of Census and Statistics | Bank of Japan, Tokyo | Bureau of Markets, Treasury Department, Shanghai | Labor Office, Bombay |
| Base period | 1913 | 1913 | 1913 | 1913 | July, 1914 | 1913 | July, 1914 | 1913 | 1913 | 1913 | 1913 | July, 1914 |
| Commodities | 48 | 174 | 74 | 160 | 78 | 150 | 92 | 180 | 187 | 56 | 117 | 42 |
| 1923 | 151 | 232 | 172 | 163 | | 158.9 | 170 | 158 | 127 | 199 | 156.4 | 181 |
| 1924 | 156 | 267 | 183 | 162 | | 166.2 | 165 | 165 | 129 | 206 | 153.9 | 182 |
| 1925 | 155 | 253 | 188 | 161 | | 159.1 | 162 | 161 | 128 | 202 | 159.4 | 163 |
| 1926 | 145 | 198 | 181 | 149 | 145 | 148.1 | 161 | 155 | 123 | 179 | 164.1 | 149 |
| 1927 | 148 | 167 | 173 | 146 | 142 | 141.4 | | 147 | 124 | 170 | 170.4 | 147 |
| 1923 | | | | | | | | | | | | |
| January | 157 | 223 | 170 | 163 | | 157.0 | 163 | | 131 | 184 | 152.7 | 181 |
| April | 156 | 229 | 174 | 168 | | 162.0 | 167 | | 126 | 196 | 157.7 | 180 |
| July | 145 | 231 | 170 | 162 | | 156.5 | 180 | | 124 | 192 | 155.4 | 178 |
| October | 148 | 235 | 171 | 161 | | 158.1 | 171 | | 125 | 212 | 156.1 | 181 |
| 1924 | | | | | | | | | | | | |
| January | 156 | 251 | 178 | 161 | | 165.4 | 174 | | 131 | 211 | 155.8 | 188 |
| April | 154 | 263 | 184 | 161 | | 164.7 | 166 | | 126 | 207 | 153.7 | 184 |
| July | 151 | 265 | 182 | 157 | | 162.6 | 163 | | 125 | 195 | 151.5 | 184 |
| October | 161 | 273 | 186 | 167 | | 170.0 | 163 | | 133 | 213 | 152.8 | 181 |
| 1925 | | | | | | | | | | | | |
| January | 160 | 279 | 191 | 169 | | 171.1 | 163 | 166 | 130 | 214 | 159.9 | 173 |
| February | 158 | 281 | 192 | 169 | | 168.9 | 162 | 162 | | 210 | 159.2 | 173 |
| March | 155 | 279 | 193 | 168 | | 166.3 | 160 | 162 | | 204 | 160.3 | 171 |
| April | 151 | 273 | 190 | 163 | | 161.9 | 158 | 162 | 130 | 202 | 159.3 | 165 |
| May | 151 | 262 | 191 | 162 | | 158.6 | 159 | 162 | | 199 | 157.8 | 164 |
| June | 158 | 260 | 187 | 161 | | 157.2 | 162 | 162 | | 200 | 157.3 | 160 |
| July | 155 | 254 | 188 | 161 | | 156.9 | 162 | 161 | 127 | 198 | 162.8 | 158 |
| August | 155 | 249 | 184 | 159 | | 156.2 | 162 | 161 | | 200 | 160.3 | 160 |

* 52 commodities in 1920; 53 commodities from August, 1920, to December, 1921.

* 147 items.

INDEX NUMBERS OF WHOLESALE PRICES IN THE UNITED STATES AND IN CERTAIN FOREIGN COUNTRIES—Continued

| Country | Netherlands | Norway | Spain | Sweden | Switzerland | United Kingdom | Australia | New Zealand | South Africa | Japan | China | India |
|------------------|------------------------------|------------------------------|---------------------------------------|---------------------|--------------------------|----------------|---------------------------------|--|---------------------------------|----------------------|--|----------------------|
| Computing agency | Central Bureau of Statistics | Central Bureau of Statistics | Institute of Geography and Statistics | Chamber of Commerce | Federal Labor Department | Board of Trade | Bureau of Census and Statistics | Census and Statistics Office (revised) | Office of Census and Statistics | Bank of Japan, Tokyo | Bureau of Markets, Treasury Department, Shanghai | Labor Office, Bombay |
| Base period | 1913 | 1913 | 1913 | 1913 | July, 1914 | 1913 | July, 1914 | 1913 | 1913 | 1913 | 1913 | July, 1914 |
| Commodities | 48 | 174 | 74 | 160 | 78 | 150 | 92 | 180 | 187 | 56 | 117 | 42 |
| 1925—Con. | | | | | | | | | | | | |
| September | 155 | 237 | 185 | 157 | ----- | 155.1 | 162 | 160 | ----- | 201 | 160.2 | 157 |
| October | 154 | 223 | 187 | 154 | ----- | 153.9 | 163 | 162 | 124 | 200 | 159.0 | 158 |
| November | 154 | 220 | 186 | 155 | ----- | 152.7 | 165 | 161 | ----- | 198 | 158.4 | 160 |
| December | 155 | 220 | 187 | 156 | ----- | 152.1 | 160 | 160 | ----- | 194 | 158.1 | 154 |
| 1926 | | | | | | | | | | | | |
| January | 153 | 214 | 186 | 153 | 153 | 151.3 | 161 | 159 | 124 | 192 | 164.0 | 154 |
| February | 149 | 211 | 186 | 152 | 147 | 148.8 | 160 | 159 | ----- | 188 | 163.0 | 151 |
| March | 145 | 205 | 183 | 149 | 146 | 144.4 | 163 | 157 | ----- | 184 | 164.4 | 150 |
| April | 143 | 199 | 179 | 150 | 145 | 143.6 | 168 | 156 | 120 | 181 | 162.8 | 151 |
| May | 143 | 197 | 179 | 151 | 143 | 144.9 | 167 | 156 | ----- | 177 | 169.7 | 151 |
| June | 144 | 194 | 177 | 150 | 143 | 146.4 | 163 | 155 | ----- | 177 | 155.8 | 150 |
| July | 141 | 192 | 178 | 148 | 145 | 148.7 | 162 | 156 | 122 | 179 | 156.9 | 149 |
| August | 139 | 193 | 180 | 147 | 142 | 149.1 | 162 | 154 | ----- | 177 | 160.5 | 148 |
| September | 140 | 193 | 178 | 146 | 142 | 150.9 | 158 | 153 | ----- | 176 | 164.2 | 149 |
| October | 143 | 198 | 179 | 148 | 144 | 152.1 | 154 | 153 | 127 | 174 | 171.1 | 147 |
| November | 147 | 199 | 185 | 148 | 142 | 152.4 | 155 | 151 | ----- | 171 | 174.4 | 146 |
| December | 147 | 184 | 186 | 150 | 142 | 146.1 | 155 | 153 | ----- | 170 | 172.0 | 146 |
| 1927 | | | | | | | | | | | | |
| January | 145 | 174 | 184 | 146 | 141 | 143.6 | 154 | 151 | 128 | 170 | 172.8 | 146 |
| February | 146 | 172 | 180 | 146 | 141 | 142.6 | 153 | 147 | ----- | 171 | 172.0 | 148 |
| March | 144 | 167 | 179 | 145 | 141 | 140.6 | 150 | 147 | ----- | 171 | 174.7 | 146 |
| April | 143 | 164 | 177 | 143 | 140 | 139.8 | 151 | 147 | 126 | 170 | 173.1 | 145 |
| May | 145 | 162 | 172 | 145 | 141 | 141.1 | 152 | 145 | ----- | 171 | 171.3 | 146 |
| June | 149 | 166 | 171 | 146 | 140 | 141.8 | 155 | 146 | ----- | 172 | 169.3 | 147 |
| July | 151 | 165 | 168 | 146 | 140 | 141.1 | 161 | 146 | 120 | 170 | 171.0 | 147 |
| August | 149 | 167 | 168 | 146 | 146 | 140.9 | 165 | 146 | ----- | 167 | 170.8 | 148 |
| September | 150 | 167 | 169 | 148 | 144 | 142.1 | 170 | 146 | ----- | 169 | 171.8 | 148 |
| October | 150 | 165 | 169 | 147 | 145 | 141.4 | 173 | 146 | 122 | 170 | 168.7 | 146 |
| November | 151 | 166 | 168 | 148 | 147 | 141.1 | 166 | 147 | ----- | 168 | 165.8 | 144 |
| December | 151 | 166 | 169 | 148 | 146 | 140.4 | 162 | 148 | ----- | 168 | 163.5 | 143 |
| 1928 | | | | | | | | | | | | |
| January | 153 | 164 | 166 | 148 | 145 | 141.1 | 163 | 150 | 123 | 169 | 163.1 | 141 |
| February | 150 | 163 | 166 | 147 | 144 | 140.3 | 160 | 147 | ----- | 169 | 164.3 | 142 |
| March | 152 | 164 | 165 | 149 | 145 | 140.8 | 160 | 148 | ----- | 169 | 163.4 | 140 |
| April | 153 | 162 | 166 | 151 | 146 | 142.9 | 162 | 147 | 121 | 170 | 163.1 | 142 |
| May | 152 | 162 | 164 | 152 | 145 | 143.6 | 159 | 148 | ----- | 171 | 164.5 | 145 |
| June | 153 | 161 | 164 | 151 | 145 | 142.6 | 158 | 148 | ----- | 169 | 160.0 | 149 |
| July | 148 | 162 | 164 | 150 | 144 | 141.1 | 157 | 148 | 119 | 169 | 159.2 | 147 |
| August | 144 | 162 | 164 | 149 | 145 | 139.3 | 154 | 147 | ----- | 176 | ----- | 146 |
| September | 145 | 158 | 166 | 146 | 145 | 137.6 | 153 | ----- | ----- | 174 | ----- | ----- |

IMMIGRATION AND EMIGRATION

Statistics of Immigration for September, 1928

By J. J. KUNNA, CHIEF STATISTICIAN UNITED STATES BUREAU OF IMMIGRATION

THE statistics for September, 1928, show 55,714 aliens admitted to the United States, comprising 29,317 immigrants or newcomers for permanent residence in this country and 26,397 nonimmigrants or visitors. While this number of immigrants is larger than that for the preceding month, it is less than that for September, 1927, when 31,000 immigrant aliens entered the country. The decrease, however, was largely confined to the countries in the Western Hemisphere, immigration from which dropped from 16,185 to 13,901, while immigration from Europe increased from 14,122 to 14,674.

During September, 8,093 emigrant aliens left the United States with the intention of making their homes abroad again, over two-thirds (5,888) of the total going to Europe and about 1 out of every 4 of these were destined to Italy. Of the remaining emigrants this month, 1,552 went to countries in the Western Hemisphere, 582 to Asia, and 71 to Africa, Australia, New Zealand, and the Pacific Islands.

While the men outnumbered the women among the emigrants leaving the country in September by nearly 2 to 1—5,203 being males and 2,890 females—the vast majority of them were adults, only 969 of the total departures giving their age as under 22 years. The married emigrants this month numbered 4,325, single 3,423, and widowed and divorced, 345.

September, 1928, saw the return of a record number of Americans from abroad, 80,233 United States citizens having arrived this month, 43,465 being females and 36,768 males, the vast majority of whom landed at the port of New York from a vacation in Europe. A large number of alien residents also returned this month from a visit to their native land, a total of 17,770 aliens having been admitted this month under the act of 1924 as returning residents.

INWARD AND OUTWARD PASSENGER MOVEMENT DURING THE FISCAL YEAR ENDED JUNE 30, 1928, AND FROM JULY 1 TO SEPTEMBER 30, 1928

| Period | Inward | | | | | Aliens de- barred from enter- ing ¹ | Outward | | | | | Aliens de- ported after land- ing ¹ |
|--|-----------------|------------------------|----------|--------------------------------------|----------|---|-----------------|-----------------------|----------|--|----------|---|
| | Aliens admitted | | | United States citizens arrived | Total | | Aliens departed | | | United States citizens de- parted | Total | |
| | Immi- grant | Non- immi- grant | Total | | | | Emi- grant | Non- emi- grant | Total | | | |
| Fiscal year end- ed June 30, 1928----- | 307, 255 | 193, 376 | 500, 631 | 430, 955 | 931, 586 | 18, 839 | 77, 457 | 196, 899 | 274, 356 | 429, 575 | 703, 931 | 11, 625 |
| July, 1928----- | 20, 682 | 15, 976 | 36, 658 | 32, 974 | 69, 632 | 1, 286 | 7, 804 | 20, 249 | 28, 053 | 68, 463 | 96, 516 | 768 |
| August, 1928----- | 24, 629 | 18, 620 | 43, 249 | 63, 191 | 106, 440 | 1, 412 | 6, 488 | 15, 960 | 22, 448 | 50, 323 | 72, 771 | 1, 186 |
| September, 1928----- | 29, 317 | 26, 397 | 55, 714 | 80, 233 | 135, 947 | 1, 304 | 8, 093 | 17, 231 | 25, 324 | 42, 105 | 67, 429 | 915 |

¹ These aliens are not included among arrivals, as they were not permitted to enter the United States.

² These aliens are included among aliens departed, they having entered the United States, legally or illegally, and later being deported.

PUBLICATIONS RELATING TO LABOR

Official—United States

CALIFORNIA.—Industrial Accident Commission. *Report, from July 1, 1926, to June 30, 1927. Sacramento, 1928. 136 pp., charts, illus.*

Not a detailed statistical report either of accidents or of compensation experience. More than 30 pages are devoted to safety suggestions, illustrated. Graphs of fatal and nonfatal industrial accidents by calendar years, 1914 to 1926, show 763 fatal, 1,235 permanent, and 90,785 temporary injuries for 1926, as compared with 677 fatal, 1,216 permanent, and 90,986 temporary injuries for the preceding year. The commission adjudicated 4,452 claims during the fiscal year, leaving 1,053 to be settled. In 1926 the losses paid under the workmen's compensation act amounted to 61.36 per cent of the premium income, a rate higher than for any preceding year back to 1915.

IOWA.—Bureau of Mines. *Report for the biennial period ending December 31, 1927. Des Moines, 1928. 83 pp.*

Devoted largely to statistics of coal production by districts, a list of operating coal companies, and the so-called Des Moines agreement made by the Iowa Coal Operators' Association and district No. 13 of the United Mine Workers of America, effective from April 1, 1924, to March 31, 1927. Statistics of fatal and nonfatal accidents, by districts and in relation to tonnage for a period of 32 years, are included.

KANSAS.—Public Service Commission. Workmen's Compensation Department. *Annual report for the fiscal year ending June 30, 1928. Topeka, 1928. 112 pp.*

A table showing industrial accidents reported during the fiscal year ended June 30, 1928, taken from this report, is given on page 116.

NEBRASKA.—Department of Labor. *Report for two years ending December 31, 1927. Lincoln, 1928. 91 pp.*

Data on workmen's compensation taken from this report appear on page 116 of this issue.

OHIO.—Department of Industrial Relations. Division of Labor Statistics. *Report No. 15: Union scale of wages and hours of labor in Ohio on May 15, 1928. Columbus, 1928. 46 pp.*

— — — — *Report No. 16: Statistics of mines and quarries in Ohio, 1927. Columbus, 1928. 59 pp.*

Data on production, number of employees, days worked, wages, and (in mines) fatal accidents.

— Industrial Commission. Division of Safety and Hygiene. *A detailed statistical study of all accident and occupational disease claims filed with the Industrial Commission of Ohio during the calendar year 1926. Columbus, 1927. 851 pp.*

Data from this report are given on page 117 of this issue.

PENNSYLVANIA.—Department of Labor and Industry. *Special bulletin No. 22: Union scale of wages and hours of labor, 1927. Harrisburg, 1928. 121 pp.; charts.*

— — — Bureau of Employment. *Pennsylvania industries and corporations having no age limit. Harrisburg, 1928. 29 pp.*

A brief note regarding the efforts of the Bureau of Employment to induce Pennsylvania employers to lift the age limit in employment of workers is published on page 93.

TENNESSEE.—Department of Labor. *Fifth annual report [for the year 1927]. Nashville, 1928. 158 pp., illus.*

Report covers the divisions of fire protection, workshop and factory, workmen's compensation, mines, and hotels. Some of the data on workmen's compensation are given on page 118 of this issue.

UNITED STATES.—Department of Commerce. Bureau of Standards. *Present home financing methods, by John M. Gries and Thomas M. Curran. Washington, 1928. 23 pp. Preliminary edition.*

A short review of this publication appears on page 137 of this issue.

— Bureau of the Census. *How to use current business statistics. Prepared by Mortimer B. Lane. Washington, 1928. 90 pp.; charts.*

Presents the experience of business men in guiding their companies profitably by statistics instead of guesswork. According to the foreword to the pamphlet "the Department of Commerce in giving wider currency to this experience hopes to contribute to the further stabilization of the business community."

— United States census of agriculture, 1925. *Summary statistics, by States—final figures. Washington, 1928. 149 pp.; map.*

— Department of Labor. Bureau of Labor Statistics. *Bulletin No. 466: Settlement for accidents to American seamen. Washington, 1928. 101 pp.*

The findings of this study were summarized in the Labor Review for June, 1928 (pp. 6-15).

— Women's Bureau. *Bulletin No. 64: The employment of women at night, by Mary D. Hopkins. Washington, 1928. 86 pp.*

Reviewed on page 94 of this issue.

— Federal Trade Commission. *Cooperative marketing. Report * * * in response to Senate Resolution No. 34, 69th Congress, special session. Washington, 1928. lviii, 721 pp.*

A review of the findings of this study is given on page 147 of this issue.

Official—Foreign Countries

AUSTRALIA.—Development and Migration Commission. *Report on unemployment and business stability in Australia. Melbourne, 1928. 53 pp.; charts.*

Reviewed on page 78 of this issue.

— (NEW SOUTH WALES).—Bureau of Statistics. *Statistical register for 1926-27. Part V.—Factories and mines. Part VI.—Rents, prices, and wages. Sydney, 1928.*

Part V includes, for factories, data on production, number of employees in different industries and number of establishments in different industries classified by number of employees, average wages per employee, production per employee, and ratio of wages paid to value added to raw materials. The mining section contains figures on output, number of miners employed, and mine and quarry accidents. In most cases comparative figures for earlier years are given.

The wage data contained in Part VI were the minima on December 31, 1927, and are presented by industry and occupation.

— (QUEENSLAND).—Public Service Commissioner. *Eighth annual report, for the year ended June 30, 1928. Brisbane, 1928. 38 pp.*

A summary of the commissioner's views and conclusions, presented to the Australian Royal Commission on Child Endowment, are given on pages 12 to 16 of the report. He concludes that the bases for determining the minimum wage should be uniform throughout the Commonwealth and that child endowment should cover those dependent children (irrespective of the parent's occupation) not provided for under the minimum wage.

AUSTRALIA (QUEENSLAND).—Registrar of Friendly Societies, Building Societies, and Industrial and Provident Societies. *Forty-third report, containing a general review of friendly societies in Queensland, lists of societies to March 31, 1928, and financial and numerical statements for the year ended June 30, 1927.* Brisbane, 1928. 30 pp.

— (SOUTH AUSTRALIA).—Factories and Steam Boilers Department. *Annual report for the year ending December 31, 1927.* Adelaide, 1928. 26 pp.

Includes data on number of factories in different industries employing each specified number of employees, number of employees by sex and age in specified industries, weekly wage rates, accidents in factories by type of injury, and working hours fixed by industrial boards in different industries.

CANADA.—Bureau of Statistics. Internal Trade Branch. *Prices and price indexes, 1913-1927 (commodities, securities, services, import and export valuations).* Ottawa, 1928. 136 pp.; charts.

— House of Commons. Select Standing Committee on Industrial and International Relations. *Report, proceedings, and evidence upon the question of insurance against unemployment, sickness, and invalidity.* Ottawa, 1928. xv, 146 pp.

— (ALBERTA).—Workmen's Compensation Board. *Tenth annual report, for the year ended December 31, 1927.* Edmonton, 1928. 42 pp.

Data from this report are given on page 119 of this issue.

GREAT BRITAIN.—Home Office. Workmen's Compensation (Silicosis) Committee. *Report of the departmental committee on compensation for silicosis, dealing with the pottery industry.* London, 1928. 41 pp.

This report was summarized on pages 67 to 69 of the November, 1928, issue of the Review.

— Mines Department. Safety in Mines Research Board. *Paper No. 44: The safety in mines research laboratories, Sheffield—a description.* London, 1928. 19 pp.; illus.

This report contains an account of the general nature of the researches carried out by the board and a description of the physical equipment of the laboratories.

INDIA.—Chief Inspector of Mines. *Annual report for the year ending December 31, 1927.* Calcutta, 1928. 193 pp.; plans, diagrams, illus.

Includes statistics on number of miners, wages and hours, output of minerals, and mine accidents.

INTERNATIONAL LABOR OFFICE.—*Studies and reports, series A (industrial relations), No. 30: Freedom of association. Vol. III.—Germany, former dual monarchy of Austria-Hungary, Austria, Hungary, Czechoslovak Republic, Poland, Baltic States, Denmark, Norway, Sweden, Finland.* Geneva, 1928. 408 pp.

NEW ZEALAND.—Department of Labor. *Report [for the financial year April 1, 1927, to March 31, 1928].* Wellington, 1928. 33 pp.

Presents statistics of unemployment, industrial accidents, industrial disputes, and proceedings under the industrial conciliation and arbitration act, the labor disputes investigation act, and the apprentices act. Lists of employers' and workers' organizations are appended.

— National Industrial Conference. *Report of proceedings.* Wellington, 1928. 450 pp.; charts.

In view of the widely differing opinions brought out in the consideration of the industrial conciliation and arbitration amendment bill in New Zealand, the Government decided to postpone action on the bill and to call a conference to attempt to bring together the apparently conflicting interests in the hope that by meeting face to face and threshing out their difficulties they might succeed in bringing peace and good will to the industries of New Zealand. In addition to industrial conciliation and arbitration, the subjects brought before the conference included unemployment and its relief, the economic position of the farmer, prices and cost of living, immigration, apprenticeship, and workmen's compensation.

SWITZERLAND.—Bureau Fédéral de Statistique. *Annuaire statistique de la Suisse, 1927. Bern, August, 1928. 388 pp. (In German and French.)*

Statistical yearbook of the Republic of Switzerland for 1927. Contains data on housing, labor disputes, employment exchanges, cooperative societies, prices of food, industrial accidents, wages, labor organizations, etc.

—Département Fédéral de l'Économie Publique. *Rapports des inspecteurs fédéraux des fabriques sur l'exercice de leurs fonctions dans les années 1926 et 1927. Aarau, 1928. 241 pp.*

A report of the activities of Federal inspectors of factories in Switzerland for the years 1926 and 1927, relating to working conditions, hygiene, social welfare, etc.

Unofficial

AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE. *The Annals, Vol. 139, No. 228: Stabilization of commodity prices. Philadelphia, September, 1928. 228 pp.*

The supplement on the subject of public construction and cyclical unemployment published with this issue is reviewed on page 82.

AMERICAN PUBLIC HEALTH ASSOCIATION. Industrial Hygiene Section. Committee for the study of industrial fatigue. *Bibliography on industrial fatigue and allied subjects. Chicago, 1928. 27 pp.*

BUREAU OF RAILWAY NEWS AND STATISTICS (CHICAGO, ILL.). *Railway statistics of the United States of America for the year ended December 31, 1927, compared with the official reports for 1926 and recent statistics of foreign railways. Chicago, 1928. 154 pp.; map, charts.*

Includes data on number of employees, wages paid, and accidents to employees and passengers.

CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE. Division of Economics and History. *Salaires et tarifs, conventions collectives et grèves. La politique du Ministère de l'Armement et du Ministère du Travail. Par William Oualid et Charles Picquenard. New Haven, Yale University Press, 1928. xii, 558 pp. (Histoire économique et sociale de la guerre mondiale, série française.)*

This study deals with the various labor problems in France during the World War, and their solution, with particular relation to wages and wage schedules, collective agreements, and strikes.

— *State control of industry in Russia during the war, by S. O. Zagorsky. New Haven, Yale University Press, 1928. xix, 351 pp.*

CONSUMERS' LEAGUE OF EASTERN PENNSYLVANIA. *Pennsylvania's rank in child labor protection. Philadelphia, 818 Otis Building, September, 1928. 12 pp.*

COOPERATIVE LEAGUE OF THE UNITED STATES OF AMERICA. *Brief report of the proceedings of the fifth congress, Minneapolis, Minn., November 4, 5, and 6, 1926. [New York, 167 West 12th St., 1927?] 30 pp. [Mimeographed.]*

An account of the proceedings of this congress appeared in the December, 1926, issue of the Labor Review (p. 83).

COYLE, GRACE L. *Jobs and marriage? Outlines for the discussion of the married woman in business. New York, Woman's Press, 1928. 101 pp.*

These outlines for discussion include the following: What happens to the home? What about the children? How about the woman herself? The double salary—is it a necessity? The older married woman in business.

CURTIS, ROY EMERSON. *Economics—principles and interpretation. Chicago, A. W. Shaw Co., 1928. 879 pp.*

FINE, NATHAN. *Labor and farmer parties in the United States, 1828–1928. New York City, Rand School of Social Science, 1928. 445 pp.*

HALONEN, GEORGE. *Why cooperation: Consumers' cooperative movement in U. S. A.* New York, Workers Library Publishers, 1928. 32 pp.

A short review of the cooperative movement (especially that of the consumers) in this country, written by the educational director of the Cooperative Central Exchange, Superior, Wis. One chapter, "Cooperation and the labor movement," presents the arguments usually advanced by those who oppose the stand of political neutrality taken by the movement.

INSTITUTE FOR GOVERNMENT RESEARCH (WASHINGTON, D. C.). *Service monographs of the United States Government, No. 49: The United States Civil Service Commission, its history, activities, and organization, by Darrell Hevenor Smith.* Baltimore, Johns Hopkins Press, 1928. 153 pp.

INTERNATIONAL ASSOCIATION FOR THE STUDY AND IMPROVEMENT OF HUMAN RELATIONS AND CONDITIONS IN INDUSTRY. *Report of first triennial congress, held at Cambridge (England) July, 1928, on the subject of fundamental relationships between all sections of the industrial community. Section 1. The Hague, Javastraat 66, 1928.* 300 pp.

The aim of this association is stated to be to provide a platform giving an opportunity "for the dispassionate study and consideration of the basic matters in industry from all angles and from every point of view." In choosing the subject for consideration at this first triennial congress, the association "was guided by a desire to search for and define the natural elements composing each section [of the industrial community], to promote within the industrial world a fuller knowledge of their relative value and to awaken a greater consciousness of their underlying unity."

The present volume contains reports from 18 different countries, including the United States, prepared in advance of the congress.

LEAGUE OF NATIONS. Advisory Commission for the Protection and Welfare of Children and Young People. Child Welfare Committee. *Report by the International Labor Office on family allowances in relation to the physical and moral well-being of children.* Geneva, 1928. 26 pp.

Information from this report is published on page 21 of this issue.

LEBEL, LÉON. *Les allocations familiales: Solution du problème des familles nombreuses.* Montreal, l'École sociale populaire, 1927. 64 pp.

A somewhat different presentation from that followed by the author in his pamphlet in English, shown below.

— *The problem of the large family in Canada—its solution, family allowances.* Montreal, 1928. 63 pp.

A brief for the establishment of family allowances in Canada, the author holding that the generalization of these grants in the Dominion would almost completely solve the material problem confronting the family, effectually check emigration, and greatly further the progress of the country.

LOGAN, HAROLD A. *The history of trade-union organization in Canada.* Chicago, University of Chicago Press, 1928. 427 pp.

A description and interpretation of the development of the labor movement in Canada.

McKENZIE, R. D. *Oriental exclusion: The effect of American immigration laws, regulations, and judicial decisions upon the Chinese and Japanese on the American Pacific Coast.* Chicago, University of Chicago Press, 1928. 200 pp.; charts.

A collection of 14 monographs which were prepared for presentation to the Institute of Pacific Relations at its conference in July, 1927. The author points out that even if all peoples with low standards of living were excluded from the United States, the economic competition of these peoples would not be eliminated because of the tendency of capital to migrate to localities where labor is cheap when such labor is unable to come to the sources of capital.

MEARS, ELIOT GRINNELL. *Resident Orientals on the American Pacific Coast—their legal and economic status.* Chicago, University of Chicago Press, 1928. 545 pp.; charts.

Some of the findings of this investigation are given on page 90 of this issue.

METROPOLITAN LIFE INSURANCE Co. Policyholders Service Bureau. *Industrial safety, No. 2: Getting facts about accidents; methods of obtaining and using accident statistics.* New York [1928?]. 23 pp.; charts.

Contains suggested forms for use in accident reporting, including the foreman's report, doctor's report, monthly record of accidents, cause record, department report, and an accident tally sheet. Intelligent use of the information tabulated is emphasized, including the use of charts. The pamphlet is one of a series being used to suggest the practical application of some of the principles of safety.

——— *Marketing California grapes.* New York, 1928. 128 pp.

Data on wage rates for picking grapes, taken from this report, are given on page 190 of this issue.

MINE INSPECTORS' INSTITUTE OF AMERICA. *Proceedings, Lexington, Ky., May 1928.* Pittsburgh, 1928. 130 pp.

Contains minutes of the nineteenth annual meeting, held at Lexington, Ky., May 14-16, 1928, and list of members of the institute.

NATIONAL HOUSING ASSOCIATION. *Publication No. 58: Recent books and reports on housing, zoning, and town planning.* New York, 105 East Twenty-second Street, October, 1928. 34 pp.

NATIONAL SOCIETY FOR THE PREVENTION OF BLINDNESS. *Publication 48: Eye accidents in industry.* New York, 370 Seventh Avenue. 48 pp.; charts, illus. (Reprinted from *Proc. of conference of National Society for the Prevention of Blindness*, Oct. 13-15, 1927.)

Contains the papers read at the joint session of the society with the National Safety Council, October 13-15, 1927. The subjects of the papers are economic aspects of industrial eye injuries; preventing industrial eye injuries; the effects of invisible radiant energy on the eye from the medical and research standpoints; the effect and control of injurious invisible light rays in industrial occupations from the practical shop point of view; and getting the "hard boiled" workman to guard his eyes.

PROSPECT UNION EDUCATIONAL EXCHANGE. *Educational opportunities of Greater Boston: Day and evening courses for working men and women.* Cambridge, Mass., 760 Massachusetts Avenue, 1928. 146 pp. (Catalogue No. 6, 1928-29.)

A selected list of study courses which are limited to men and women who have had less than a high-school education. The courses cover a wide range of subjects.

SOULE, GEORGE. *Wage arbitration—selected cases, 1920-1924.* New York, Macmillan Co., 1928. 298 pp.

A case book of wage arbitrations between unions and employers, summarizing the arguments of both sides as well as the decisions, and covering cases in the book and job printing industry, Chicago packing houses, railroads, and Cleveland garment industry.

WALDER, EMMA. *Die Beteiligung der Frau an der Amerikanischen Gewerkschaftsbewegung.* Weinfelden, Switzerland, A-G. Neuenschwander'sche Verlagsbuchhandlung, 1926. 181 pp.

Report on the participation of women in American labor union movements.

WISCONSIN, UNIVERSITY OF. Bureau of Economics and Sociology. *Informational bulletin No. 1: Index of the laws of Wisconsin relating to children, compiled from the 1927 statutes by Ida Helen Steel.* Madison, 1928. 17 pp. [Mimeographed.]

LIST OF BULLETINS OF THE BUREAU OF LABOR STATISTICS

The following is a list of all bulletins of the Bureau of Labor Statistics published since July, 1912, except that in the case of bulletins giving the results of periodic surveys of the bureau only the latest bulletin on any one subject is here listed.

A complete list of the reports and bulletins issued prior to July, 1912, as well as the bulletins published since that date, will be furnished on application. Bulletins marked thus () are out of print.*

Conciliation and Arbitration (Including strikes and lockouts).

- *No. 124. Conciliation and arbitration in the building trades of Greater New York. [1913.]
- *No. 133. Report of the industrial council of the British Board of Trade on its inquiry into industrial agreements. [1913.]
- No. 139. Michigan copper district strike. [1914.]
- No. 144. Industrial court of the cloak, suit, and skirt industry of New York City. [1914.]
- No. 145. Conciliation, arbitration, and sanitation in the dress and waist industry of New York City. [1914.]
- *No. 191. Collective bargaining in the anthracite coal industry. [1916.]
- *No. 198. Collective agreements in the men's clothing industry. [1916.]
- No. 233. Operation of the industrial disputes investigation act of Canada. [1918.]
- No. 255. Joint industrial councils in Great Britain. [1919.]
- No. 283. History of the Shipbuilding Labor Adjustment Board, 1917 to 1919.
- No. 287. National War Labor Board: History of its formation, activities, etc. [1921.]
- No. 303. Use of Federal power in settlement of railway labor disputes. [1922.]
- No. 341. Trade agreement in the silk-ribbon industry of New York City. [1923.]
- No. 402. Collective bargaining by actors. [1926.]
- No. 468. Trade agreements, 1927. (In press.)
- No. 481. Joint industrial control in the book and job printing industry. [1928.] (In press.)

Cooperation.

- No. 313. Consumers' cooperative societies in the United States in 1920.
- No. 314. Cooperative credit societies in America and in foreign countries. [1922.]
- No. 437. Cooperative movement in the United States in 1925 (other than agricultural).

Employment and Unemployment.

- *No. 109. Statistics of unemployment and the work of employment offices [in the United States]. [1913.]
- No. 172. Unemployment in New York City, N. Y. [1915.]
- *No. 183. Regularity of employment in the women's ready-to-wear garment industries. [1915.]
- *No. 195. Unemployment in the United States. [1916.]
- No. 196. Proceedings of Employment Managers' Conference held at Minneapolis, Minn., January 19 and 20, 1916.
- *No. 202. Proceedings of the conference of Employment Managers' Association of Boston, Mass., held May 10, 1916.
- No. 206. The British system of labor exchanges. [1916.]
- No. 227. Proceedings of the Employment Managers' Conference, Philadelphia, Pa., April 2 and 3, 1917.
- No. 235. Employment system of the Lake Carriers' Association. [1918.]
- *No. 241. Public employment offices in the United States. [1918.]
- No. 247. Proceedings of Employment Managers' Conference, Rochester, N. Y., May 9-11, 1918.
- No. 310. Industrial unemployment: A statistical study of its extent and causes. [1922.]
- No. 409. Unemployment in Columbus, Ohio, 1921 to 1925.

Foreign Labor Laws.

- *No. 142. Administration of labor laws and factory inspection in certain European countries. [1914.]

Housing.

- *No. 158. Government aid to home owning and housing of working people in foreign countries. [1914.]
- No. 263. Housing by employers in the United States. [1920.]
- No. 295. Building operations in representative cities in 1920.
- No. 469. Building permits in the principal cities of the United States in [1921 to] 1927. (In press.)

Industrial Accidents and Hygiene.

- *No. 104. Lead poisoning in potteries, tile works, and porcelain enameled sanitary ware factories. [1912.]
- No. 120. Hygiene of the painters' trade. [1913.]
- *No. 127. Dangers to workers from dusts and fumes, and methods of protection. [1913.]
- *No. 141. Lead poisoning in the smelting and refining of lead. [1914.]
- *No. 157. Industrial accident statistics. [1915.]
- *No. 165. Lead poisoning in the manufacture of storage batteries. [1914.]
- *No. 179. Industrial poisons used in the rubber industry. [1915.]
- No. 188. Report of British departmental committee on the danger in the use of lead in the painting of buildings. [1916.]
- *No. 201. Report of committee on statistics and compensation insurance cost of the International Association of Industrial Accident Boards and Commissions. [1916.]
- *No. 207. Causes of death by occupation. [1917.]
- *No. 209. Hygiene of the printing trades. [1917.]
- *No. 219. Industrial poisons used or produced in the manufacture of explosives. [1917.]
- No. 221. Hours, fatigue, and health in British munition factories. [1917.]
- No. 230. Industrial efficiency and fatigue in British munition factories. [1917.]
- *No. 231. Mortality from respiratory diseases in dusty trades (inorganic dusts). [1918.]
- *No. 234. Safety movement in the iron and steel industry, 1907 to 1917.
- No. 236. Effects of the air hammer on the hands of stonecutters. [1918.]
- No. 249. Industrial health and efficiency. Final report of British Health of Munition Workers' Committee. [1919.]
- *No. 251. Preventable death in the cotton-manufacturing industry. [1919.]
- No. 256. Accidents and accident prevention in machine building. [1919.]
- No. 267. Anthrax as an occupational disease. [1920.]
- No. 276. Standardization of industrial accident statistics. [1920.]
- No. 280. Industrial poisoning in making coal-tar dyes and dye intermediates. [1921.]
- No. 291. Carbon-monoxide poisoning. [1921.]
- No. 293. The problem of dust phthisis in the granite-stone industry. [1922.]
- No. 298. Causes and prevention of accidents in the iron and steel industry, 1910-1919.
- No. 300. Occupational hazards and diagnostic signs: A guide to impairments to be looked for in hazardous occupations. [1922.]
- No. 339. Statistics of industrial accidents in the United States. [1923.]
- No. 392. Survey of hygienic conditions in the printing trades. [1925.]
- No. 405. Phosphorus necrosis in the manufacture of fireworks and in the preparation of phosphorus. [1926.]
- No. 425. Record of industrial accidents in the United States to 1925.
- No. 426. Deaths from lead poisoning. [1927.]
- No. 427. Health survey of the printing trades, 1922 to 1925.
- No. 428. Proceedings of the Industrial Accident Prevention Conference, held at Washington, D. C., July 14-16, 1925.
- No. 460. A new test for industrial lead poisoning. [1928.]
- No. 466. Settlement for accidents to American seamen. [1928.]

Industrial Relations and Labor Conditions.

- No. 237. Industrial unrest in Great Britain. [1917.]
- No. 340. Chinese migrations, with special reference to labor conditions. [1923.]
- No. 349. Industrial relations in the West Coast lumber industry. [1923.]
- No. 361. Labor relations in the Fairmont (W. Va.) bituminous-coal field. [1924.]
- No. 380. Postwar labor conditions in Germany. [1925.]
- No. 383. Works council movement in Germany. [1925.]
- No. 384. Labor conditions in the shoe industry in Massachusetts, 1920-1924.
- No. 399. Labor relations in the lace and lace-curtain industries in the United States. [1925.]

Labor Laws of the United States (including decisions of courts relating to labor).

- No. 211. Labor laws and their administration in the Pacific States. [1917.]
- No. 229. Wage-payment legislation in the United States. [1917.]
- No. 285. Minimum-wage laws of the United States: Construction and operation. [1921.]
- No. 321. Labor laws that have been declared unconstitutional. [1922.]
- No. 322. Kansas Court of Industrial Relations. [1923.]
- No. 343. Laws providing for bureaus of labor statistics, etc. [1923.]
- No. 370. Labor laws of the United States, with decisions of courts relating thereto. [1925.]
- No. 408. Laws relating to payment of wages. [1926.]
- No. 444. Decisions of courts and opinions affecting labor, 1926.
- No. 467. Minimum wage legislation in various countries. [1928.] (In press.)
- No. 470. Labor legislation of 1927. (In press.)

Proceedings of Annual Conventions of the Association of Governmental Labor Officials of the United States and Canada. (Name changed in 1928 to Association of Governmental Officials in Industry of the United States and Canada.)

- *No. 266. Seventh, Seattle, Wash., July 12-15, 1920.
- No. 307. Eighth, New Orleans, La., May 2-6, 1921.
- No. 323. Ninth, Harrisburg, Pa., May 22-26, 1922.
- No. 352. Tenth, Richmond, Va., May 1-4, 1923.
- *No. 389. Eleventh, Chicago, Ill., May 19-23, 1924.
- *No. 411. Twelfth, Salt Lake City, Utah, August 13-15, 1925.
- No. 429. Thirteenth, Columbus, Ohio, June 7-10, 1926.
- No. 455. Fourteenth, Paterson, N. J., May 31 to June 3, 1927.
- No. 480. Fifteenth, New Orleans, La., May 15-24, 1928. (In press.)

Proceedings of Annual Meetings of the International Association of Industrial Accident Boards and Commissions.

- No. 210. Third, Columbus, Ohio, April 25-28, 1916.
- No. 248. Fourth, Boston, Mass., August 21-25, 1917.
- No. 264. Fifth, Madison, Wis., September 24-27, 1918.
- *No. 273. Sixth, Toronto, Canada, September 23-26, 1919.
- *No. 281. Seventh, San Francisco, Calif., September 20-24, 1920.
- No. 304. Eighth, Chicago, Ill., September 19-23, 1921.
- No. 333. Ninth, Baltimore, Md., October 9-13, 1922.
- No. 359. Tenth, St. Paul, Minn., September 24-26, 1923.
- No. 385. Eleventh, Halifax, Nova Scotia, August 26-28, 1924.
- No. 395. Index to proceedings, 1914-1924.
- No. 406. Twelfth, Salt Lake City, Utah, August 17-20, 1925.
- No. 432. Thirteenth, Hartford, Conn., September 14-17, 1926.
- No. 456. Fourteenth, Atlanta, Ga., September 27-29, 1927.

Proceedings of Annual Meetings of the International Association of Public Employment Services.

- No. 192. First, Chicago, December 19 and 20, 1913; Second, Indianapolis, September 24 and 25, 1914; Third, Detroit, July 1 and 2, 1915.
- No. 220. Fourth, Buffalo, N. Y., July 20 and 21, 1916.
- No. 311. Ninth, Buffalo, N. Y., September 7-9, 1921.
- No. 337. Tenth, Washington, D. C., September 11-13, 1922.
- No. 355. Eleventh, Toronto, Canada, September 4-7, 1923.
- No. 400. Twelfth, Chicago, Ill., May 19-23, 1924.
- No. 414. Thirteenth, Rochester, N. Y., September 15-17, 1925.
- No. 478. Fifteenth, Detroit, Mich., October 25-28, 1927.

Productivity of Labor.

- No. 356. Productivity costs in the common-brick industry. [1924.]
- No. 360. Time and labor costs in manufacturing 100 pairs of shoes, 1923.
- No. 407. Labor cost of production and wages and hours of labor in the paper box-board industry. [1926.]
- No. 412. Wages, hours, and productivity in the pottery industry, 1925.
- No. 441. Productivity of labor in the glass industry. [1927.]
- No. 474. Productivity of labor in merchant blast furnaces. [1928.] (In press.)
- No. 475. Productivity of labor in newspaper printing. [1928.] (In press.)

Retail Prices and Cost of Living.

- *No. 121. Sugar prices, from refiner to consumer. [1913.]
- *No. 130. Wheat and flour prices, from farmer to consumer. [1913.]
- No. 164. Butter prices, from producer to consumer. [1914.]
- No. 170. Foreign food prices as affected by the war. [1915.]
- No. 357. Cost of living in the United States. [1924.]
- No. 369. The use of cost-of-living figures in wage adjustments. [1925.]
- No. 464. Retail prices, 1890 to 1927. (In press.)

Safety Codes.

- *No. 331. Code of lighting: Factories, mills, and other work places.
- No. 336. Safety code for the protection of industrial workers in foundries.
- No. 350. Specifications of laboratory tests for approval of electric headlighting devices for motor vehicles.
- No. 351. Safety code for the construction, care, and use of ladders.
- No. 375. Safety code for laundry machinery and operation.
- No. 378. Safety code for woodworking plants.
- No. 382. Code of lighting school buildings.
- No. 410. Safety code for paper and pulp mills.
- No. 430. Safety code for power presses and foot and hand presses.
- No. 433. Safety codes for the prevention of dust explosions.
- No. 436. Safety code for the use, care, and protection of abrasive wheels.
- No. 447. Safety code for rubber mills and calenders.
- No. 451. Safety code for forging and hot-metal stamping.
- No. 463. Safety code for mechanical power-transmission apparatus. First revision.

Vocational Workers' Education.

- *No. 159. Short-unit courses for wage earners, and a factory school experiment. [1915.]
- *No. 162. Vocational education survey of Richmond, Va. [1915.]
- No. 199. Vocational education survey of Minneapolis, Minn. [1917.]
- No. 271. Adult working-class education in Great Britain and the United States. [1920.]
- No. 459. Apprenticeship in building construction. [1928.]

Wages and Hours of Labor.

- *No. 146. Wages and regularity of employment and standardization of piece rates in the dress and waist industry of New York City. [1914.]
- *No. 147. Wages and regularity of employment in the cloak, suit, and skirt industry. [1914.]
- No. 161. Wages and hours of labor in the clothing and cigar industries, 1911 to 1913.
- No. 163. Wages and hours of labor in the building and repairing of steam railroad cars, 1907 to 1913.
- *No. 190. Wages and hours of labor in the cotton, woolen, and silk industries, 1907 to 1914.
- No. 204. Street-railway employment in the United States. [1917.]
- No. 225. Wages and hours of labor in the lumber, millwork, and furniture industries, 1915.
- No. 265. Industrial survey in selected industries in the United States, 1919.
- No. 297. Wages and hours of labor in the petroleum industry, 1920.
- No. 356. Productivity costs in the common-brick industry. [1924.]
- No. 358. Wages and hours of labor in the automobile-tire industry, 1923.
- No. 360. Time and labor costs in manufacturing 100 pairs of shoes, 1923.
- No. 365. Wages and hours of labor in the paper and pulp industry, 1923.
- No. 394. Wages and hours of labor in metalliferous mines, 1924.
- No. 407. Labor costs of production and wages and hours of labor in the paper box-board industry. [1926.]
- No. 412. Wages, hours, and productivity in the pottery industry, 1925.
- No. 413. Wages and hours of labor in the lumber industry in the United States, 1925.
- No. 416. Hours and earnings in anthracite and bituminous coal mining, 1922 and 1924.
- No. 435. Wages and hours of labor in the men's clothing industry, 1911 to 1926.
- No. 438. Wages and hours of labor in the motor-vehicle industry, 1925.
- No. 442. Wages and hours of labor in the iron and steel industry, 1907 to 1926.
- No. 443. Wages and hours of labor in woolen and worsted goods manufacturing, 1910 to 1926.
- No. 446. Wages and hours of labor in cotton-goods manufacturing, 1910 to 1926.
- No. 450. Wages and hours of labor in the boot and shoe industry, 1907 to 1926.
- No. 452. Wages and hours of labor in the hosiery and underwear industries, 1907 to 1926.
- No. 454. Hours and earnings in bituminous-coal mining, 1922, 1924, and 1926.
- No. 457. Union scales of wages and hours of labor, May 15, 1927.
- No. 471. Wages and hours of labor in foundries and machine shops, 1927. (In press.)
- No. 472. Wages and hours of labor in slaughtering and meat packing, 1927. (In press.)
- No. 476. Union scales of wages and hours of labor, 1927. Supplement to Bul. 457. (In press.)

Welfare Work.

- *No. 123. Employers' welfare work. [1913.]
- No. 222. Welfare work in British munition factories. [1917.]
- *No. 250. Welfare work for employees in industrial establishments in the United States. [1919.]
- No. 458. Health and recreation activities in industrial establishments, 1926.

Wholesale Prices.

- No. 284. Index numbers of wholesale prices in the United States and foreign countries. [1921.]
- No. 440. Wholesale prices, 1890 to 1926.
- No. 453. Revised index numbers of wholesale prices, 1923 to July, 1927.
- No. 473. Wholesale prices 1913 to 1927. (In press.)

Women and Children in Industry.

- No. 116. Hours, earnings, and duration of employment of wage-earning women in selected industries in the District of Columbia. [1913.]
- *No. 117. Prohibition of night work of young persons. [1913.]
- No. 118. Ten-hour maximum working-day for women and young persons. [1913.]
- No. 119. Working hours of women in the pea canneries of Wisconsin. [1913.]
- *No. 122. Employment of women in power laundries in Milwaukee. [1913.]
- No. 160. Hours, earnings, and conditions of labor of women in Indiana mercantile establishments and garment factories. [1914.]
- *No. 167. Minimum-wage legislation in the United States and foreign countries. [1915.]
- *No. 175. Summary of the report on condition of woman and child wage earners in the United States. [1915.]
- *No. 176. Effect of minimum-wage determinations in Oregon. [1915.]
- *No. 180. The boot and shoe industry in Massachusetts as a vocation for women. [1915.]
- *No. 182. Unemployment among women in department and other retail stores of Boston, Mass. [1916.]
- No. 193. Dressmaking as a trade for women in Massachusetts. [1916.]
- No. 215. Industrial experience of trade-school girls in Massachusetts. [1917.]
- *No. 217. Effect of workmen's compensation laws in diminishing the necessity of industrial employment of women and children. [1918.]
- No. 223. Employment of women and juveniles in Great Britain during the war. [1917.]
- No. 253. Women in the lead industries. [1919.]

Workmen's Insurance and Compensation (including laws relating thereto).

- *No. 101. Care of tuberculous-wage earners in Germany. [1912.]
- *No. 102. British national insurance act, 1911.
- No. 103. Sickness and accident insurance law of Switzerland. [1912.]
- No. 107. Law relating to insurance of salaried employees in Germany. [1913.]
- *No. 155. Compensation for accidents to employees of the United States. [1914.]
- No. 212. Proceedings of the conference on social insurance called by the International Association of Industrial Accident Boards and Commissions, Washington, D. C., December 5-9, 1916.
- *No. 243. Workmen's compensation legislation in the United States and foreign countries, 1917 and 1918.
- No. 301. Comparison of workmen's compensation insurance and administration. [1922.]
- No. 312. National health insurance in Great Britain, 1911 to 1921.
- No. 379. Comparison of workmen's compensation laws of the United States as of January 1, 1925.
- No. 423. Workmen's compensation legislation of the United States and Canada as of July 1, 1926.
- No. 477. Public-service retirement systems, United States and Europe. [1928.] (In press.)

Miscellaneous Series.

- *No. 174. Subject index of the publications of the United States Bureau of Labor Statistics up to May 1, 1915.
- No. 208. Profit sharing in the United States. [1916.]
- No. 242. Food situation in central Europe, 1917.
- No. 254. International labor legislation and the society of nations. [1919.]
- No. 268. Historical survey of international action affecting labor. [1920.]
- No. 282. Mutual relief associations among Government employees in Washington, D. C. [1921.]
- No. 299. Personnel research agencies: A guide to organized research in employment management, industrial relations, training, and working conditions. [1921.]
- No. 319. The Bureau of Labor Statistics: Its history, activities, and organization. [1922.]
- No. 326. Methods of procuring and computing statistical information of the Bureau of Labor Statistics. [1923.]
- No. 342. International Seamen's Union of America: A study of its history and problems. [1923.]
- No. 346. Humanity in government. [1923.]
- No. 372. Convict labor in 1923.
- No. 386. Cost of American almshouses. [1925.]
- No. 398. Growth of legal-aid work in the United States. [1926.]
- No. 401. Family allowances in foreign countries. [1926.]
- No. 420. Handbook of American trade-unions. [1926.]
- No. 439. Handbook of labor statistics, 1924 to 1926.
- No. 461. Labor organizations in Chile. [1928.] (In press.)
- No. 462. Park recreation areas in the United States. [1928.]
- No. 465. Beneficial activities of American trade-unions. [1928.]
- No. 479. Activities and functions of a State department of labor. [1928.]

[The text on this page is extremely faint and illegible. It appears to be a multi-paragraph document, possibly a letter or a report, with some lines of text visible in the upper and lower portions. There are some dark smudges and marks near the bottom center of the page.]

U. S. DEPARTMENT OF LABOR
JAMES J. DAVIS, Secretary
BUREAU OF LABOR STATISTICS
ETHELBERT STEWART, Commissioner

MONTHLY
LABOR REVIEW

INDEX TO VOLUME 27

JULY TO DECEMBER, 1928



UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1929

U. S. DEPARTMENT OF LABOR
JAMES J. DUFFY, Director
BUREAU OF LABOR STATISTICS
STUART WILSON, Chief Clerk

MONTHLY

LABOR REVIEW

INDEX TO VOLUME 27

JULY TO DECEMBER, 1922



GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.
1923

Index to Volume 27—July to December, 1928

NOTE.—This is a SUBJECT INDEX. Names of authors do not appear as main entries

| | Page |
|--|-------------|
| Accident prevention, general: | |
| Legislation of 1928, fireproofing, boiler inspection..... | Dec. 123 |
| Safety. Bills introduced, 1927-28 (70th Cong., 1st sess.)..... | Aug. 92-3 |
| Safety education, 4-year experiment, Essex County vocational school, West Orange (N. J.)..... | Aug. 52-3 |
| Safety movement and the International Labor Conference (Magnusson)..... | Oct. 40-2 |
| Accident prevention, by industry: | |
| Mining, coal. Mechanical systems and increased accident hazards, study of, and recommendations..... | Aug. 49-51 |
| Portland Cement Association, policy, results, 1919 to 1927..... | Aug. 51-2 |
| Accident statistics, by industry: | |
| Cement. Portland Cement Association, record, 1919 to 1927..... | Aug. 51 |
| Coke ovens. Bureau of Mines report, 1926..... | Aug. 48-9 |
| Metallurgical works. Experience, 1926. Bureau of Mines Technical Paper No. 430..... | Nov. 56-7 |
| Mining, metalliferous. Colorado, 1926 and 1927..... | Sept. 70 |
| Oil industry. California, petroleum drilling and producing, fatalities in 1927..... | Dec. 97-8 |
| — Oklahoma, pipe-tool accidents, 1923..... | Aug. 54-5 |
| Railroads. Experience, 1926 and 1927, Interstate Commerce Commission Bulletin No. 96..... | Sept. 68-9 |
| Accident statistics, by locality: | |
| Canada (Alberta). By cause, 1927..... | Dec. 120 |
| Illinois. By cause, and extent of disability, 1925-26..... | Aug. 66 |
| Kansas. By industry, and nature of injury, 1927-28..... | Dec. 116 |
| New Jersey. By cause and compensation paid, 1927..... | Dec. 98 |
| New York State. By cause and by compensation paid, 1927-28..... | Dec. 98-100 |
| — Compensated accidents, by kind of disability, 1927 and 1928..... | Dec. 114-15 |
| — Infection cases, hands and fingers, by cause, 1927 and 1928..... | Dec. 100 |
| Pennsylvania. Fatalities, by industry group, 1927 and 1928..... | Sept. 70-1 |
| Wisconsin. Compensation cases settled, by cause and kind of injury, 1927..... | Dec. 118-19 |
| Actors' Equity Association: | |
| Attitude of members toward "talking movies"..... | Nov. 160 |
| Adult workers' education. (See Vocational education; Workers' education.) | |
| Age limit in employment, campaign to abolish, Pennsylvania..... | Dec. 93 |
| Agreements. (See Collective agreements.) | |
| Agriculture (except Wages and hours, which see): | |
| Cotton harvesting. Labor requirements and costs, Oklahoma and Texas..... | Oct. 50-2 |
| Italy. Share system (<i>mezzadria</i>)..... | July 31-2 |
| American Federation of Labor: | |
| General health work of..... | Dec. 16 |
| Apprenticeship (except Wages and hours, which see): | |
| Great Britain (England and Northern Ireland). Skilled occupations, methods of training in. Ministry of Labor final report..... | Sept. 105-7 |
| — (and Northern Ireland). Training methods, engineering and other metal industries. Ministry of Labor investigations of 1925 and 1926..... | Aug. 98 |
| Railroads. Union Pacific System training scheme..... | Nov. 99-101 |
| Arbitration. (See Conciliation and arbitration.) | |
| Asiatics. (See Orientals.) | |
| Association of Governmental Labor Officials of the United States and Canada: | |
| Convention. Annual (fifteenth), New Orleans, May, 1928, resolutions..... | Aug. 36-7 |
| Automobile industry (except Wages and hours, which see): | |
| Chromium compounds, poisoning from..... | Aug. 63 |
| Exhaust gas, hazard of. Streets and repair shops..... | Nov. 60-1 |
| Production increase, Nash Motors Co..... | Aug. 41 |

INDEX TO VOLUME 27

[1928]

| | |
|--|--------------|
| Batteries, dry-cell, manufacture of (<i>except</i> Wages and hours, <i>which see</i>): | Page |
| Description of occupations..... | Nov. 123-4 |
| Batteries, storage, manufacture of (<i>except</i> Wages and hours, <i>which see</i>): | |
| Description of occupations..... | Nov. 125-7 |
| Benefits and benefit funds: | |
| Mutual Benefit Associations, National Conference on, organization of..... | Dec. 104-5 |
| Benzol poisoning. (<i>See</i> Industrial diseases and poisons.) | |
| Bibliographies: | |
| Injunctions in labor disputes (Thompson)..... | Sept. 201-20 |
| Blast furnace, merchant. (<i>See</i> Iron and steel industry.) | |
| Blind, industrial aid for. (<i>See</i> Handicapped, training, and placement of.) | |
| Bookbinders, International Brotherhood of: | |
| Transformation from hand to machine trade, resolution, July, 1928..... | Nov. 113 |
| Brewery, Flour, Cereal, and Soft Drink Workers of America, International Union of the United: | |
| Arbitration policy with employers..... | Oct. 18 |
| Bricklayers, Masons, and Plasterers, International Union of America: | |
| Arbitration policy with employers..... | Oct. 18 |
| Budgets, cost-of-living: | |
| China (Peking). Family budgets (60), detailed analysis..... | Oct. 191-4 |
| South Africa. Family budget expenditures, August-October, 1928, projected inquiry.. | Oct. 194-5 |
| United States. Brotherhood of Railway Clerks, resolution..... | Aug. 211 |
| Building and loan associations: | |
| United States. Development, 1926-27..... | Nov. 91-2 |
| Building construction industry (<i>except</i> Wages and hours, <i>which see</i>), United States: | |
| Construction cost, average, dwellings in large cities..... | Nov. 27-30 |
| New York State. Industrial Survey Commission, second report, 1928..... | Sept. 47 |
| Permits issued in principal cities, first half of 1928..... | Oct. 108-40 |
| Unemployment statistics. Massachusetts, May to August, 1928..... | Oct. 159-60 |
| Business place, removal of, and possible loss of employees, Massachusetts legislation..... | Sept. 78-9 |
| Cancer, mule-spinners'. (<i>See</i> Industrial diseases and poisons.) | |
| Candy. (<i>See</i> Confectionery.) | |
| Capital and labor. (<i>See</i> Industrial relations.) | |
| Carmen of America, Brotherhood of Railway: | |
| Cooperative policy with employers..... | Oct. 15 |
| Carpenters and Joiners of America, United Brotherhood of: | |
| Old-age pension plan, adoption of..... | Nov. 112 |
| Carpet-weaving industry (<i>except</i> Wages and hours, <i>which see</i>): | |
| Trade-union cooperation with employers..... | Oct. 10 |
| Cement industry (<i>except</i> Wages and hours, <i>which see</i>): | |
| Accident prevention policy, Portland Cement Association, results, 1919 to 1927..... | Aug. 51-2 |
| Dust hazard, and health of workers. United States Public Health Service Bulletin No. 176..... | Oct. 56-9 |
| Child labor and welfare, United States: | |
| District of Columbia. Act (70th Cong.) of 1928, analysis..... | July 66-8 |
| — Act of 1908 superseded by act of May 29, 1928..... | Aug. 92 |
| Indiana. School attendance National Child Labor Committee survey..... | Sept. 61-2 |
| Legislation, and bills introduced, 1927-28 (70th Cong., 1st sess.)..... | Aug. 92 |
| Legislation of 1928, New York, Rhode Island, and Virginia..... | Dec. 124-6 |
| Pennsylvania. Illegally employed children, compensation status..... | Oct. 67-9 |
| Street trades. Children's Bureau survey, eight cities, 1922-23 and later..... | Sept. 60-1 |
| Tennessee. Child labor law liberally construed, court decision..... | Nov. 89-90 |
| Child labor and welfare, foreign countries: | |
| Great Britain (England). Advisory committees for juvenile employment, report, 1927... | Nov. 53-5 |
| Japan. Mining, prohibition of child labor..... | Nov. 55 |
| Russia (Soviet). Labor Code provisions..... | July 35 |
| Venezuela. New law, principal provisions..... | Dec. 134-6 |
| Chinese. (<i>See</i> Orientals.) | |
| Chromium compounds, poisoning. (<i>See</i> Industrial diseases and poisons.) | |
| Chromium plating, health hazard. (<i>See</i> Industrial diseases and poisons.) | |
| Cigar Makers' International Union of America: | |
| Arbitration policy with employers..... | Oct. 18 |
| City park systems, recreational opportunities provided by..... | July 1-7 |
| Clerks, Brotherhood of Railway: | |
| Cost-of-living budget study, new, resolution..... | Aug. 211 |

INDEX TO VOLUME 27

[1928]

| | |
|---|------------------------|
| Clerks, Freight Handlers, Express, and Station Employees, Brotherhood of Railway and Steamship: | Page |
| Award. St. Louis-San Francisco Railway Co., August 2, 1928..... | Oct. 202-3 |
| Cloth hat and cap industry. (<i>See</i> Hat and cap industry, cloth.) | |
| Clothing industry, men's (<i>except</i> Wages and hours, <i>which see</i>): | |
| Unemployment insurance. Chicago and Rochester plans, 3-year agreements..... | July 56-7 |
| Clothing industry, women's (<i>except</i> Wages and hours, <i>which see</i>): | |
| Trade-union cooperation with employers..... | Oct. 12, 13 |
| Clothing Workers of America, Amalgamated: | |
| Contract relations with David Adler & Sons, broken; operation of new plant by union, Milwaukee (Wis.)..... | Dec. 171-2 |
| Cooperative policy with employers..... | Oct. 11-12, 13, 20, 22 |
| General health work of..... | Dec. 18-19 |
| Housing activities..... | Aug. 3-9 |
| Unemployment insurance, agreement with New York Clothing Manufacturers' Exchange..... | Sept. 96-7 |
| Unemployment insurance fund, 3-year agreement providing, Chicago and Rochester..... | July 56-7 |
| Coke ovens (<i>except</i> Wages and hours, <i>which see</i>): | |
| Accident statistics, 1926. Bureau of Mines report..... | Aug. 48-9 |
| Collective agreements, by industry, United States: | |
| Clothing industry, men's. Chicago and Rochester, 3-year, providing unemployment insurance fund..... | July 56-7 |
| — New York, unemployment insurance provision..... | Sept. 96-7 |
| Mining, coal. Rocky Mountain Fuel Co. and United Mine Workers, September, 1928..... | Oct. 196-202 |
| Collective agreements, foreign countries: | |
| Great Britain (England). Railroads, wage-cut agreement, August 13, 1928..... | Sept. 149-50 |
| — Woolen and worsted industry..... | Sept. 23-4 |
| Sweden. Compulsory arbitration, act of May 25, 1928..... | Aug. 118 |
| Conciliation and arbitration, United States: | |
| Arbitration and trade board decisions. (<i>See under specific industries.</i>) | |
| Department of Labor. (<i>See article "Conciliation work of the Department of Labor," each issue of Review.</i>) | |
| Local unions providing by agreement for joint settlement of disputes..... | Oct. 17-18 |
| Railroad labor act of 1926. Arbitrators agreeing to disagree, court decision..... | Sept. 73-4 |
| — Emergency board, creation and membership, trainmen's dispute, western roads..... | Oct. 84 |
| — Emergency board report, trainmen's dispute, western roads..... | Dec. 170 |
| — Presidential Emergency Board under, findings, Kansas City, Mexico & Orient Railway case, full text..... | Aug. 114-17 |
| Conciliation and arbitration, foreign countries: | |
| Germany. Labor courts under act of December 23, 1926, operation..... | Aug. 117-18 |
| Great Britain. Industrial court (act of 1919), operation..... | July 102-5 |
| Poland. Labor courts in former Russian and Austrian territory..... | July 105-6 |
| Sweden. Labor courts, under act of May 25, 1928, operation..... | Aug. 118 |
| Venezuela. New law for settlement of labor disputes..... | Dec. 135 |
| Conciliation court. (<i>See</i> Small claims court.) | |
| Conductors, Order of Sleeping Car: | |
| Cooperative policy with employers..... | Oct. 12 |
| Confectionery industry (<i>except</i> Wages and hours, <i>which see</i>): | |
| Boston. Educational experiment, school girls factory apprentices every other week..... | July 77-8 |
| Congresses. (<i>See</i> Conventions, meetings, etc.) | |
| Construction work: | |
| Hoover (President-elect) plan for three billion dollar reserve fund..... | Dec. 49-9 |
| Public works and unemployment, a study of, 1919 to 1925..... | Dec. 82-5 |
| Consumers' Club, New York City, new guide in purchasing..... | Aug. 211 |
| Consumers' societies. (<i>See</i> Cooperation.) | |
| Continuation schools. (<i>See</i> Vocational education.) | |
| Contracts, employment: | |
| Theatrical artists and musicians, Brazil, legislation..... | Dec. 130 |
| Conventions, meetings, etc.: | |
| Bookbinders, International Brotherhood of, annual convention, San Francisco, July 9-14, 1928..... | Nov. 113 |
| Canadian Trades and Labor Congress, forty-fourth annual meeting, September 10-14, 1928..... | Dec. 153-5 |
| Consumers' Cooperative Societies, Sixth Congress, 1928..... | Dec. 135-45 |
| French Family Allowance Funds, General Congress (eighth), 1928..... | July 40-1 |
| Governmental Labor Officials of the United States and Canada, Association of. Convention, 1928, resolutions..... | Aug. 36-7 |

INDEX TO VOLUME 27

[1928

Conventions, meetings, etc.—Continued

| | |
|--|-------------------|
| International Association of Industrial Accident Boards and Commissions, fifteenth annual meeting..... | Page Nov. 76-8 |
| Miners' Congress, Twenty-eighth International, Nimes, France, May, 1928, resolutions..... | Sept. 103-4 |
| Mutual Benefit Associations, National Conference on..... | Dec. 104-5 |
| Public Employment Services of the United States and Canada, International Association of, sixteenth annual convention..... | Nov. 160-1 |
| Safety Congress, seventeenth, New York..... | Nov. 57-8 |
| Social work, conference on, first regional (California, Oregon, Washington), Yosemite National Park, May, 1928..... | Aug. 37-9 |
| Convict labor: | |
| Legislation. Statutes passed, by State, 1928..... | Dec. 127 |
| Legislation, and bills introduced, 1927-28 (70th Cong., 1st sess.)..... | Aug. 90-1 |
| Cooperation, United States: | |
| Agricultural, in typical areas, Minnesota..... | Oct. 73 |
| Agricultural associations, membership, by State, 1925..... | Aug. 80 |
| Building and loan associations, development, 1926-27..... | Nov. 91-2 |
| Consumers' cooperation, 1927 and 1928, review of..... | Aug. 75-8 |
| Consumers' Cooperative Societies, Sixth Congress, 1928..... | Dec. 138-45 |
| Consumers' societies, sales and net profits, 1927 and 1928..... | Aug. 77 |
| Court decision. Marketing act, Kentucky, validity..... | Aug. 78-9 |
| Eastern Cooperative Wholesale (Inc.), formation..... | Oct. 71 |
| Farmers' marketing cooperatives and consumers' cooperatives, relations between (Herron)..... | Dec. 145-7 |
| Housing societies, development, 1927 and 1928..... | Aug. 78 |
| Labor banks. Condition, as of June 30, 1928..... | Oct. 71-2 |
| Marketing associations, Federal Trade Commission, report on..... | Dec. 147-52 |
| Marketing organizations, new trend in contractual relations..... | Oct. 72-3 |
| Postal credit unions, development, 1923 to 1928..... | July 47 |
| Cooperation, foreign countries: | |
| Belgium. Consumers' societies, productive societies, statistics of development, 1925, 1926-27..... | July 48 |
| — Development, 1924 to 1927..... | Oct. 74 |
| — National organizations, statistics of operation, 1926..... | July 48 |
| Canada. New developments, Cooperative Union not limited to consumers' societies..... | Nov. 92-3 |
| — United Grain Growers and affiliated retail societies, statistics of operation, 1926, 1927..... | Aug. 80-1 |
| Italy. Agricultural and other societies..... | Nov. 98 |
| — Consumers' societies, historical survey..... | Nov. 94-7 |
| — Workers' productive societies, historical survey..... | Nov. 97-8 |
| Latin America, Italy, Spain, and Rumania. Development of movement..... | Nov. 93-4 |
| Cooperation, union-management. (<i>See</i> Union-management cooperation.) | |
| Cosmetic industry (<i>except</i> Wages and hours, <i>which see</i>): | |
| Occupational diseases among workers, New York..... | Oct. 55-6 |
| Cost of living, United States: | |
| Budget-study, new, resolution of Brotherhood of Railway Clerks..... | Aug. 211 |
| Changes, by city, and by item of expenditure, 1915 to 1928..... | Aug. 186-99 |
| Index numbers. Comparison, with foreign countries, by expenditure group, 1913 to 1924, by month, 1926 to 1928..... | Aug. 201-10 |
| Cost of living, foreign countries: | |
| Australia. Index numbers, by expenditure group, 1913 to 1923, by month, 1924 to 1928..... | Aug. 202-10 |
| Belgium. Index numbers, by expenditure group, 1921 to 1923, by month, 1924 to 1928..... | Aug. 201-9 |
| Canada. Index numbers, by expenditure group, 1913 to 1923, by month, 1924 to 1928..... | Aug. 201-9 |
| Czechoslovakia (Prague). Index numbers, by expenditure group, 1923, by month, 1924 to 1928..... | Aug. 201-9 |
| Denmark. Index numbers, by expenditure group, 1914 to 1923, by month, 1924 to 1928..... | Aug. 201-9 |
| Finland. Index numbers, by expenditure group, 1914 to 1923, by month, 1924 to 1928..... | Aug. 201-9 |
| France (Paris). Index numbers, by expenditure group, 1914 to 1923, by month, 1924 to 1928..... | Aug. 201-9 |
| Germany. Index numbers, by expenditure group, 1914 to 1923, by month, 1924 to 1928..... | Aug. 201-9 |
| India (Bombay). Index numbers, by expenditure group, 1914 to 1923, by month, 1924 to 1928..... | Aug. 202-10 |
| Ireland. Index numbers, by expenditure group, 1914 to 1923, by month, 1924 to 1928..... | Aug. 201-3 |
| Italy (Milan). Index numbers, by expenditure group, 1914 to 1923, by month, 1924 to 1928..... | Aug. 201-9 |
| Netherlands (Hague). Index numbers, by expenditure group, 1921 to 1923, by month, 1924 to 1928..... | Aug. 202-4 |

INDEX TO VOLUME 27

[1928

Cost of living, foreign countries—Continued

| | |
|--|---------------------|
| New Zealand. Index numbers, by expenditure group, 1914 to 1923, by month, 1924 to 1928..... | Page Aug. 202-10 |
| Norway. Index numbers, by expenditure group, 1914 to 1923, by month, 1924 to 1928... | Aug. 202-10 |
| Poland (Warsaw). Index numbers, by expenditure group, 1914, by month, 1926 to 1928... | Aug. 202-10 |
| South Africa. Index numbers, by expenditure group, 1914 to 1923, by month, 1924 to 1928..... | Aug. 202-4 |
| Sweden. Index numbers, by expenditure group, 1914 to 1923, by month, 1924 to 1928... | Aug. 202-10 |
| Switzerland. Index numbers, by expenditure group, 1914 to 1923, by month, 1924 to 1928... | Aug. 202-10 |
| United Kingdom. Index numbers, by expenditure group, 1914 to 1923, by month, 1924 to 1928..... | Aug. 202-10 |

Decisions of courts:

| | |
|--|-------------|
| Child labor law liberally construed, Tennessee..... | Nov. 89-90 |
| Continuation school law held constitutional, New York..... | Sept. 77-8 |
| Cooperative marketing act, Kentucky, validity..... | Aug. 78-9 |
| Detectives, industrial, licensing of, Wisconsin law held constitutional..... | Sept. 83 |
| Employment agency of Pacific coast shipowners not a combination in restraint of trade. | Dec. 127-30 |
| Employment agency, private. New Jersey law (fee-fixing provision) held unconstitutional..... | July 68-72 |
| Longshoremen and harbor-workers act of 1927, constitutionality..... | Dec. 112 |
| Morris & Co. pension plan, Illinois..... | Sept. 76-7 |
| Nonunion workmen, refusal to work with, pipe-organ builders, New York City..... | Sept. 83-5 |
| Railroad labor act of 1926, arbitrators agreeing to disagree..... | Sept. 73-4 |
| Railroad telephone operator, statutory qualification for, held unconstitutional, Arizona... | Sept. 81-3 |
| Unlawful assembly and unlawful arrest. Silk mills, New Jersey..... | Sept. 74-5 |
| — Weld County, Colo..... | Sept. 75-6 |
| Workmen's compensation. Ohio State fund classification upheld..... | Dec. 112-13 |
| — Texas Employers' Insurance Association, selection of risks, no discretionary power.. | Oct. 69-70 |

Dermatitis, industrial. (See Industrial diseases and poisons.)

Detectives, industrial:

| | |
|--|----------|
| Licensing of. Wisconsin law held constitutional, court decision..... | Sept. 83 |
|--|----------|

Directories:

| | |
|--|--------------|
| Labor officials. Foreign countries..... | July 192-8 |
| — United States, Federal and State..... | July 178-92 |
| Legal Aid Organizations, National Association of. Members..... | July 199-200 |
| Legal aid work, groups engaged in..... | July 200 |

Disputes, labor. (See Industrial disputes.)

Docks and harbors (except Wages and hours, which see):

| | |
|---|------------|
| Longshoremen and harbor workers. Compensation act of 1927, amendment of, 1928.... | July 49 |
| — Compensation act of 1927, constitutionality..... | Dec. 112 |
| — Compensation act of 1927, 1-year experience under..... | Sept. 90-3 |
| — Compensation legislation, 1927-28 (70th Cong., 1st sess.)..... | Aug. 94-5 |

"Dopolavoro" (leisure hours). (See Recreation.)

Dusts:

| | |
|--|-----------|
| Cement industry, calcium dust, pathological effects, United States Public Health Service Bulletin No. 176..... | Oct. 56-9 |
|--|-----------|

Dwellings. (See Building construction industry; Housing.)

Earnings. (See Wages and hours.)

Economic situation of the American Indians..... Oct. 43-7

Education. (See Vocational education; Workers' education.)

Electrical Workers of America, International Brotherhood of:

| | |
|--|---------|
| Arbitration policy with employers..... | Oct. 21 |
|--|---------|

Employers' associations, foreign countries:

| | |
|--|---------|
| Venezuela. New law on employers' and workers' organizations..... | Dec 136 |
|--|---------|

Employers' liability for accidents within the national parks, act of Congress, February 1, 1928.....

Nov. 78-9

Employment agencies:

| | |
|--|-------------|
| European labor exchanges, the work of (Speek)..... | Dec. 49-61 |
| Legislation of 1928, Louisiana and New Jersey..... | Dec. 122-3 |
| New Jersey. Fee-fixing provisions of law held unconstitutional..... | July 68-72 |
| Pacific Coast Shipowners' Marine Service Bureau not a combination in restraint of trade, court decision..... | Dec. 127-30 |

Employment, stabilization of:

| | |
|---|------------|
| Australia. Seasonal fluctuations and business stability..... | Dec. 78-82 |
| Hoover (President-elect) plan for three billion dollar reserve construction fund..... | Dec. 48-9 |

INDEX TO VOLUME 27

[1928]

| | |
|---|--|
| Employment, stabilization of—Continued. | Page |
| Iron and steel industry. Stability of employment in..... | Nov. 1-3 |
| Mining, bituminous coal. Shutdown of 10 mines. Consolidation Coal Co. marketing and operating policy..... | July 27-8 |
| Employment statistics, United States: | |
| Boot and shoe industry. New England, Middle Atlantic, and North Central States, January, 1923, to August, 1928..... | Oct. 153-6 |
| Building-trades workers, unemployment, Massachusetts, May to August, 1928..... | Oct. 159-60 |
| California. April to September, 1928..... | July 143; Aug. 154; Sept. 169; Oct. 163; Nov. 163; Dec. 212 |
| Character and value of..... | Dec. 34-41 |
| Illinois. April to September, 1928..... | July 140; Aug. 152; Sept. 166; Oct. 161; Nov. 161; Dec. 210 |
| Iowa. May to October, 1928..... | July 140; Aug. 152; Sept. 166; Oct. 161; Nov. 161; Dec. 210 |
| Manufacturing industries, May to October, 1928..... | July 127-38; Aug. 139-50; Sept. 153-64; Oct. 142-53; Nov. 141-52; Dec. 192-204 |
| Maryland. May to October, 1928..... | July 140-1; Aug. 152; Sept. 167; Oct. 161; Nov. 161; Dec. 210 |
| Massachusetts. May to October, 1928..... | July 141; Aug. 152; Sept. 167; Oct. 161; Nov. 161-2; Dec. 210 |
| Mining, coal. October, 1928..... | Dec. 204-5 |
| New Jersey. April to September, 1928..... | July 141; Aug. 152; Sept. 167; Oct. 162; Dec. 210 |
| New York. April to September, 1928..... | July 141, 143; Aug. 152-3, 154; Sept. 167, 179; Oct. 162, 163; Nov. 162, 163; Dec. 211, 213 |
| Oklahoma. May to October, 1928..... | July 141-2, 143; Aug. 153, 154; Sept. 167-8, 169; Oct. 162, 163-4; Nov. 162, 164; Dec. 211, 213 |
| Pennsylvania. May to October, 1928..... | July 142, 143; Aug. 153, 154; Sept. 168, 169; Oct. 162, 164; Nov. 162, 164; Dec. 211, 213 |
| Public utilities establishments, September and October, 1928..... | Nov. 155-6; Dec. 205-6 |
| Railroads. April to September, 1928..... | July 139-40; Aug. 151; Sept. 165-6; Oct. 158-9; Nov. 158-9; Dec. 208 |
| — Index numbers, by month, 1923 to 1928..... | July 139; Aug. 151; Sept. 165; Oct. 158; Nov. 158; Dec. 207 |
| — Stability of employment, by road and by occupation, 1922-1927 (Dunlap)..... | Aug. 19-28 |
| Retail trade, by geographic division, August to October, 1928..... | Oct. 157; Nov. 157; Dec. 207 |
| Wholesale trade, by geographic division, August to October, 1928..... | Oct. 156-7; Nov. 156-7; Dec. 206 |
| Wisconsin. March to September, 1928..... | July 142, 144; Aug. 153, 154-5; Sept. 168, 169-70; Oct. 162-3, 164; Nov. 163, 164; Dec. 211-12, 213-14 |
| Employment statistics, foreign countries: | |
| Character and value of, by country..... | Dec. 34-5, 41-8 |
| Cotton-goods mills, by district, 1923 to 1928..... | Nov. 152-5 |
| Engineering: | |
| Apprenticeship and training, Great Britain, 1925 and 1926..... | Aug. 98 |
| Engineers, Brotherhood of Locomotive: | |
| General health work of..... | Dec. 19 |
| Housing and land development project..... | Aug. 1, 14 |
| Engravers' Union of North America, International Photo-: | |
| General health work, tuberculosis benefits..... | Dec. 20 |
| Eye injuries compensated. (See Workmen's compensation and insurance.) | |
| Factory inspection. (See Sanitation, working conditions, and factory inspection.) | |
| Family allowances: | |
| Australia. Civil service, amount of allowances and attitude of personnel..... | Dec. 23, 36 |
| Austria. Civil service, amount of allowances and attitude of personnel..... | Dec. 23, 26 |
| Belgium. Act of April 14, 1928, provisions..... | July 39-40 |
| — Civil service, amount of allowances..... | Dec. 23 |
| Bulgaria. Civil service, amount of allowances..... | Dec. 23 |
| Civil service, foreign countries..... | Dec. 20-7 |
| Czechoslovakia. Civil service, amount of allowances..... | Dec. 23 |
| France. Civil service, amount of allowances and attitude of personnel..... | Dec. 23, 26 |
| — General Congress of Family Allowance Funds, 1928..... | July 40-1 |
| Germany. Civil service, amount of allowances and attitude of personnel..... | Dec. 23-4, 26-7 |
| Greece. Civil service, amount of allowances..... | Dec. 24 |
| Hungary. Civil service, amount of allowances..... | Dec. 24 |
| Italy. Civil service, amount of allowances..... | Dec. 24 |
| Netherlands. Civil service, amount of allowances and attitude of personnel..... | Dec. 24, 27 |
| Norway. Civil service, amount of allowances..... | Dec. 24 |
| Poland. Civil service, amount of allowances..... | Dec. 25 |
| Spain. Civil service, amount of allowances..... | Dec. 25 |

INDEX TO VOLUME 27

[1928]

| | |
|--|-------------------|
| Family allowances—Continued. | Page |
| Sweden. Civil service, amount of allowances..... | Dec. 25 |
| Switzerland. Civil service, amount of allowances and attitude of personnel..... | Dec. 25, 27 |
| Yugoslavia. Civil service, amount of allowances..... | Dec. 25 |
| Family damage when wage earner dies. Metropolitan Life Insurance Co. study..... | Nov. 66 |
| Farmers' marketing cooperatives. (<i>See</i> Cooperation.) | |
| Fatigue: | |
| Great Britain. Physique of women in industry, anthropometric data, London and Glasgow factories..... | Aug. 61-3 |
| Feeble-minded, industrialization of (Stewart)..... | July 7-14 |
| Financing the home, methods of..... | Dec. 137 |
| Firemen retirement systems. (<i>See</i> Old-age and invalidity insurance and pensions.) | |
| Garment Workers of America, United: | |
| Cooperative policy with employers..... | Oct. 16, 18, 19 |
| Garment Workers' Union, International Ladies': | |
| Cooperative policy with employers..... | Oct. 12 |
| Health work of..... | Dec. 13-15, 16-18 |
| Union Health Center, New York City, work of..... | Dec. 16-18 |
| Glass industry (<i>except</i> Wages and hours, <i>which see</i>): | |
| Trade-union cooperation with employers..... | Oct. 10-11 |
| Glass Workers, National Window: | |
| Arbitration policy with employers..... | Oct. 19 |
| Governmental Labor Officials, Association of. (<i>See</i> Association of Governmental Labor Officials of the United States and Canada.) | |
| Group life insurance: | |
| Legislation. Massachusetts and New Jersey, 1928..... | Dec. 127 |
| Policies issued to labor unions, legal status (Witte)..... | Nov. 108-11 |
| Handicapped, training and placement of: | |
| Blind, State boards or commissions for the, Louisiana and Mississippi, 1928..... | Dec. 159-60 |
| Harbor workers. (<i>See</i> Docks and harbors.) | |
| Hat and cap industry, cloth (<i>except</i> Wages and hours, <i>which see</i>): | |
| Trade-union cooperation with employers, New York..... | Oct. 10 |
| Health and hygiene: | |
| Dusty trades. Health of workers in Portland cement plant..... | Oct. 56-9 |
| Food handling. Physical examination of employees engaged in, legislation, Massachusetts, 1928..... | Dec. 126 |
| Labor organizations, general health work of..... | Dec. 11-20 |
| Medical care, ability of patients to pay for..... | Dec. 101-3 |
| Noise, effect on production, experiment, German factory..... | Aug. 41-2 |
| Office workers, health conditions among. Metropolitan Life Insurance Co. study..... | Aug. 58-60 |
| Poland. Nurseries in factories, for infants of woman workers, law of July 29, 1928..... | Dec. 106 |
| Posture and seating, industrial workers..... | Nov. 63-5 |
| Russia (Soviet). Health work, 1917 to 1927..... | July 43-6 |
| Health hazards: | |
| Automobile exhaust gas, carbon-monoxide hazard, streets and repair shops..... | Nov. 60-1 |
| Chromium plating, poisoning risk..... | Nov. 61-3 |
| Spray painting, studies of hazards..... | Sept. 63-7 |
| Health insurance, foreign countries: | |
| Russia (Soviet). State system of social insurance including health service..... | July 45 |
| Home financing, methods of. (<i>See</i> Housing.) | |
| Home making, teaching of. (<i>See</i> Workers' education.) | |
| Horsepower equipment (prime movers), growth in use of, United States, 1849 to 1923..... | July 36-8 |
| Hosiery industry (<i>except</i> Wages and hours, <i>which see</i>): | |
| Trade-union cooperation with employers..... | Oct. 13-14 |
| Hospital service. (<i>See</i> Medical and hospital service.) | |
| Hours of labor. (<i>See</i> Shift systems; Wages and hours.) | |
| Housing, United States: | |
| Building permits issued, by kind of building, 85 cities, first half of 1928..... | Oct. 108-40 |
| Clothing Workers of America, Amalgamated. Housing activities..... | Aug. 2-9 |
| Construction cost of dwellings, average, in large cities..... | Nov. 27-30 |
| Cooperative societies, development, 1927 and 1928..... | Aug. 78 |
| Engineers, Brotherhood of Locomotive. Housing and land development project..... | Aug. 1, 14 |
| Financing the home, methods of..... | Dec. 137 |
| Home-finance companies of trade-unions, Florida, Illinois, Minnesota, Ohio, and Texas..... | Aug. 14-18 |
| Legislation, and bills introduced, 1927-28 (70th Cong., 1st sess.)..... | Aug. 93 |
| United Workers' Cooperative Association. Apartment house building, financing, etc..... | Aug. 9-14 |

INDEX TO VOLUME 27

[1928

| | |
|---|--|
| Housing, foreign countries: | Page |
| Chile (Iquique). Conditions, July, 1928..... | Oct. 141 |
| France. Cheap dwellings for workmen, act of July 9, 1928, summary..... | Sept. 102 |
| Russia. Policy, 1928..... | Aug. 72-4 |
| Immigration: | |
| Canada. Statistics, by sex, occupation, and destination, 1927-28..... | July 177 |
| United States. Statistics, April to September, 1928..... | July 176-7; |
| | Aug. 214-15; Sept. 197-200; Oct. 204-5; Nov. 196-7; Dec. 241 |
| (See also Emigration.) | |
| Indians, American, economic situation of..... | Oct. 43-7 |
| Industrial conditions, reports on, by commissions, etc.: | |
| Australian view of industry in the United States..... | Nov. 35-7 |
| Industrial courts. (See Conciliation and arbitration.) | |
| Industrial diseases and poisons: | |
| Automobile exhaust gas, carbon monoxide hazard of, streets and repair shops..... | Nov. 60-1 |
| Benzol poisoning in chemical laboratories..... | Sept. 67-8 |
| British factories. Report, chief inspector, 1927..... | Oct. 61-4 |
| Cancer, mule-spinners' (Hoffman)..... | Sept. 27-45 |
| Chromium compounds, poisoning from, automobile industry..... | Aug. 63 |
| Chromium plating, health hazards in..... | Nov. 61-3 |
| Dermatitis, industrial. Massachusetts record, 1926-27..... | Oct. 60 |
| Lacquer solvents, inhalation experiments with..... | Nov. 59-60 |
| Lead poisoning. France, cases in 1927..... | Dec. 121 |
| — Massachusetts record, 1926-27..... | Oct. 60 |
| Mule-spinners' cancer (Hoffman)..... | Sept. 27-45 |
| Occupational diseases. Bolivia, law of April 18, 1928..... | Nov. 67 |
| — Cosmetic factories, New York..... | Oct. 55-6 |
| — France, decree of February 19, 1927, compulsory reporting..... | Dec. 120-1 |
| — Massachusetts, report, 1926-27..... | Oct. 59-60 |
| — Ohio, report, 1926-27..... | Nov. 79 |
| Radioactive paint, poisoning cases from, among watch-dial painters..... | July 42-3 |
| Radium necrosis. Death of Dr. S. A. von Sochocky..... | Dec. 103 |
| Silicosis. Compensation for, Great Britain..... | Nov. 67-9 |
| — Western Australia, metalliferous mines, 1925-26..... | Aug. 64-5 |
| Tuberculosis. Western Australia, metalliferous mines, 1925-26..... | Aug. 64-5 |
| Industrial disputes, general: | |
| Labor disputes, 1916 to 1927, analysis (16-tables)..... | July 82-91 |
| Industrial disputes, United States, by industry and locality: | |
| Artists' models. Chicago (Ill.), strike, June 10-25, 1928..... | Aug. 109 |
| Barbers. Boston (Mass.), strike, June 4-23, 1928..... | Aug. 109 |
| — Newark (N. J.), strike, June 20 to July 1, 1927..... | July 93 |
| — New York City, strikes, April, June, and August, 1928..... | July 93, 99; Oct. 82 |
| Bricklayers. Pittsburgh (Pa.), strike, June 1 to 11, 1927..... | July 93 |
| Building laborers. Connecticut, strike, May 4 to 14, 1927..... | July 93 |
| — Rhode Island, strike, June 1 to August 25, 1927..... | July 93 |
| Building trades. Baltimore (Md.), bricklayers and plasterers, jurisdictional strike, July 12 to 22, 1927..... | July 93-4 |
| — Illinois and Iowa, strike, June 12-21, 1928..... | Aug. 109-10 |
| Carpenters. Bridgeport (Conn.), strike, June 1 to July 5, 1928..... | Aug. 109 |
| — Buffalo (N. Y.), strike, June 1-7, 1928..... | Aug. 109 |
| Carpenters, millwork. Chicago (Ill.), strike, May 9 to 28, 1927..... | July 93 |
| Cleaners and dyers. New Jersey, strike, July 15 to July 21, 1927..... | July 93 |
| Clothing workers. Baltimore (Md.), strike, March 23-28, 1927..... | July 92 |
| — Milwaukee (Wis.), lockout, David Adler & Sons Co., April, 1928..... | Dec. 166; 171-2 |
| — New York City, stoppage, June 26-28, 1928..... | Aug. 110 |
| Collar makers. Troy (N. Y.), strike, July 9 to 12, 1928..... | Sept. 110 |
| Cotton mills. Massachusetts, mill operatives, strike of April 16, 1928, wage cut accepted October 6..... | Oct. 83 |
| Dental laboratory workers. New York and New Jersey, strike, May 16..... | July 98-9; Aug. 110 |
| Express workers. New York, "outlaw" strike, October 9-11, 1928..... | Dec. 163-4 |
| Filling-station attendants. Chicago (Ill.), strike, July 8 to 9, 1927..... | July 94 |
| Glass workers. American Window Glass Co. and three unions, strike, October 1 to 14, 1927..... | July 95-6 |
| Hod carriers. Rhode Island, strike, June 1 to August 25, 1927..... | July 93 |
| Mining, anthracite. Pennsylvania Coal Co., Underwood Colliery, strike, August 13-21, 1928..... | Oct. 82 |

| | |
|---|--|
| Industrial disputes, United States, by industry and locality—Continued. | Page |
| Mining, anthracite. Pennsylvania, Maxwell Colliery No. 20, strike, July 11 to 24, 1928.. | Sept. 111 |
| — Pennsylvania, Panther Creek Valley, strike, July 5 to 9, 1928..... | Sept. 110 |
| — Pennsylvania, South Penn Collieries Co., strike, September 11-17, 1928..... | Nov. 116 |
| — Pennsylvania, strikes, Susquehanna Collieries Co., July and October, 1928.. | Sept. 110; Dec. 165 |
| Mining, bituminous coal. Bills introduced, 1927-28 (70th Cong., 1st sess.)..... | Aug. 93 |
| — Central Competitive Field and western Pennsylvania, strike, April 1 to October 1, 1927..... | July 92 |
| — Illinois, wage agreement, September 1, 1928..... | Oct. 83-4 |
| — Iowa, 1-day strike, October 1, 1928..... | Dec. 166 |
| — Iowa, strike of April 1 ended September 28, 1928..... | Nov. 117 |
| — Kansas, strike, September 24-27, 1928..... | Nov. 116 |
| — Orient (Ill.), "wildcat" strike, October 8-13, 1928..... | Dec. 165-6 |
| — Suspensions of April 1, 1927, and April 1, 1928, continuance..... | July 99; Dec. 166 |
| — United Mine Workers of America, strike, continuance..... | Aug. 110-11 |
| — Wage-scale agreements effected with operators' associations..... | Sept. 111 |
| — Wyoming, strike, Rock Springs district, October 16-19, 1928..... | Dec. 165 |
| Mining, coal. Central City (Ky.), strike, November 1 to 10, 1927..... | July 96 |
| — Colorado, strike, October 18, 1927, to February 19, 1928..... | July 96 |
| — Pennsylvania, Maxwell Colliery, strike, May 2-3, 1928..... | July 98 |
| — Pennsylvania, West End Coal Co., strike, May 21 to June 14, 1927..... | July 93 |
| Motion-picture machine operators. Chicago (Ill.), strike, August 29 to September 3, 1927..... | July 94 |
| Musicians. Chicago motion-picture houses, strike, September 3-7, 1928..... | Nov. 116 |
| Oil refinery workers. Bayonne (N. J.), strike, May 16-22, 1928..... | July 99 |
| Plumbers. Brooklyn (N. Y.), strike, April 1 to June 14, 1927..... | July 92 |
| Poultry (live) workers. New York City, strike, January 3 to 10, 1927..... | July 91 |
| Raincoat makers. Boston (Mass.), strike, August 25 to 29, 1927..... | July 94 |
| Rubber workers. Massachusetts, strike, Cambridge Rubber Co., October 29-November 5, 1928..... | Dec. 164 |
| Shingle-mill workers. Washington, strike, February 1 to March 11, 1927..... | July 91 |
| Silk workers. Paterson (N. J.), strike, October 10-31, 1928..... | Dec. 164-5 |
| Statistics. May to October, 1928..... | July 96-9; |
| | Aug. 107-9; Sept. 108-11; Oct. 80-2; Nov. 114-16; Dec. 161-3 |
| Structural-iron workers. Boston (Mass.), strike, May 23 to June 4, 1928..... | July 99 |
| Tank-wagon drivers. Chicago (Ill.), strike, July 8 to 9, 1927..... | July 94 |
| Teamsters and chauffeurs. New York City, strike, September 15-16, 1927..... | July 95 |
| Teamsters and truckers. New York City, strike, September 7 to 15, 1927..... | July 95 |
| Textile workers. Henderson (N. C.), strike, August 4 to September 19, 1927..... | July 94 |
| — Massachusetts, strike of April 16..... | July 99; Aug. 110; Sept. 111; Nov. 117 |
| — Rhode Island, strike, February 21 to April 11, 1927..... | July 91-2 |
| Industrial disputes, foreign, by country: | |
| Argentina (Buenos Aires). Strike statistics, by industry and sex, 1927..... | Oct. 88 |
| Japan. Seamen, establishment of minimum wage, June, 1928..... | Nov. 139-40 |
| Sweden. Iron mines labor conflict, January 2 to August 27, 1928, settlement..... | Dec. 172 |
| — Labor disputes, important industries, 1928..... | July 106-8 |
| — Strikes and lockouts, attitude of unemployment commission..... | July 65 |
| Uruguay. Strikes, 1920 to 1926..... | Aug. 119 |
| Industrial management: | |
| Trade-union cooperation with employers..... | Oct. 1-23 |
| Waste elimination through adoption of suggestions of employees, shipbuilding plant..... | Aug. 42-3 |
| Industrial relations: | |
| China. Capital and labor, attitude of (Tso)..... | Aug. 28-9 |
| Great Britain (England). Industrial Transference Board, appointment, and report..... | Sept. 56-9 |
| — Organized workers and organized employers, joint conference (Mond), first report..... | Sept. 53-6 |
| Industrialization of the South..... | Dec. 86 |
| New York State Department of Labor, activities and functions of..... | Nov. 31-4 |
| — Workmen's compensation administration, Lindsay Rogers report..... | Sept. 94-6 |
| New York State Industrial Survey Commission, second report, 1928..... | Sept. 46-8 |
| Southern industrial and labor problems..... | Dec. 86-9 |
| Industrial research: | |
| Japan. Unemployment research bureau established, functions..... | Nov. 165 |
| Organized labor research departments, work of..... | Nov. 4-9 |
| Industrial schools. (See Vocational education.) | |
| Industrialization of the feeble-minded (Stewart)..... | July 7-14 |

INDEX TO VOLUME 27

[1928

| | |
|---|--------------------|
| Injunctions: | Page |
| Anti-injunction bill in Congress, present status..... | Nov. 85-9 |
| In labor disputes, bibliography (Thompson)..... | Sept. 201-20 |
| Legislation, and bills introduced, 1927-28 (70th Cong., 1st sess.)..... | Aug. 93 |
| New York State Industrial Survey Commission report (second), 1928..... | Sept. 47 |
| Insurance, group life. (See Group life insurance.) | |
| International Association of Industrial Accident Boards and Commissions: | |
| Accomplishments, 1914 to 1928..... | Nov. 19-26 |
| Meeting, fifteenth annual, Paterson (N. J.), September 11-14, 1928..... | Nov. 76-8 |
| International Labor Conference: | |
| Sessions. Eleventh, and the safety movement (Magnusson)..... | Oct. 40-2 |
| — Eleventh, Geneva, May 30 to June 16, 1927..... | Sept. 103 |
| Iron and steel industry (except Wages and hours, which see), United States: | |
| Blast furnaces, merchant. Productivity of labor in..... | Dec. 1-10 |
| Stability of employment in..... | Nov. 1-3 |
| Iron and steel industry (except Wages and hours, which see), foreign countries: | |
| China. Pig iron production, cost items..... | Aug. 43-7 |
| Japanese. (See Orientals.) | |
| Juvenile employment. (See Child labor and welfare.) | |
| Labor, a State department of. Activities and functions, Bul. No. 479..... | Nov. 31-4 |
| Labor and capital. (See Industrial relations.) | |
| Labor banks. (See Cooperation.) | |
| Labor conditions: | |
| Cotton-mill villages of the South, are they feudalistic?..... | Dec. 87 |
| Florida. Trade-union movement, 1901 to 1926..... | Dec. 88 |
| Georgia. Organization of workers..... | Dec. 88 |
| Germany. Skilled labor, scarcity of..... | Oct. 49 |
| Louisiana. Crafts in need of organization..... | Dec. 89 |
| Mississippi. Cooperation between business men and labor leaders..... | Dec. 89 |
| North Carolina, labor progress in..... | Dec. 87-8 |
| Pennsylvania. Age limit in employment, campaign to abolish..... | Dec. 93 |
| Southern workers, changing attitude of..... | Dec. 87 |
| Texas. Trade-unionism, expansion..... | Dec. 89 |
| Labor courts. (See Conciliation and arbitration.) | |
| Labor exchanges. (See Employment agencies.) | |
| Labor movement, China (Tso)..... | Aug. 28-33 |
| Labor officials, changes in personnel of: | |
| California. Death of F. B. Lord, manager of compensation department..... | Nov. 82 |
| Labor organizations, United States: | |
| General health work of..... | Dec. 11-20 |
| Group life insurance policies, issuance of, legal status..... | Nov. 108-11 |
| Housing activities of labor groups..... | Aug. 1-18 |
| Industrial research work by organized labor..... | Nov. 4-9 |
| Labor organizations, foreign countries: | |
| Brazil (Rio de Janeiro). Commercial employees' association, development since 1880..... | Aug. 120-1 |
| Canada. Membership and branch statistics, 1927..... | July 81 |
| — Trades and Labor Congress, 44th annual meeting, September 10-14, 1928..... | Dec. 153-5 |
| China. Unionism, development and spread of (Tso)..... | Aug. 32 |
| Germany. Federation of Labor, its strength and organization (Kummer)..... | Dec. 27-33 |
| Japan. Trade-union membership, by industrial group, 1927..... | Aug. 120 |
| Venezuela. New law on employers and workers organizations..... | Dec. 136 |
| Labor turnover: | |
| Factory experience and length of service..... | Oct. 53-4 |
| Manufacturers reporting to Metropolitan Life Insurance Co., by month, 1927, 1928 .. | July 27; Oct. 53-4 |
| (See also Mobility of labor.) | |
| Lacquer solvents. (See Industrial diseases and poisons.) | |
| Laws and legislation, United States: | |
| Anti-injunction bill, Congress, present status..... | Nov. 85-9 |
| Arkansas. Railroad repair work to be done within State..... | Sept. 81 |
| Child labor. District of Columbia, act of 1928 (70th Cong.), analysis..... | July 66-8 |
| Contract of employment. Legislation of 1928, Mississippi and Virginia..... | Dec. 122 |
| Employers' liability within the national parks, act of Congress, February 1, 1928..... | Nov. 78-9 |
| Labor. Bills introduced, and legislation, 1927-28 (70th Cong., 1st sess.)..... | Aug. 90-7 |
| Labor legislation of 1928, Federal, State, and Territorial..... | Dec. 122-7 |
| Louisiana. Railroad repair work to be done within State, text..... | Sept. 81 |

Laws and legislation, United States—Continued.

| | Page |
|---|-------------|
| Massachusetts. Old-age pensions act of June 12, 1928..... | Aug. 82 |
| — Removal of place of business and possible loss to employee..... | Sept. 78-9 |
| Mechanics' lien. By State, statutes passed, 1928..... | Dec. 127 |
| Montana. Railroad terminals, removal of, and property loss to employees..... | Sept. 79-81 |
| Texas. Railroad repair work to be done within State..... | Sept. 81 |
| Woman labor. Regulatory and prohibitory legislation, effects on employment opportunities. Women's Bureau Bulletin No. 65..... | Nov. 41-52 |
| Workmen's compensation. By State, 1928..... | Dec. 107-12 |

Laws and legislation, foreign countries:

| | |
|--|------------|
| Australia (Queensland). Unemployment insurance act of 1922, amendment of December, 1927..... | July 57-8 |
| Belgium. Family allowances, act of April 14, 1928..... | July 39-40 |
| Bolivia. Mining police, duties, decree of February 2, 1928..... | Aug. 40 |
| — Occupational diseases, act of April 18, 1928..... | Nov. 67 |
| Brazil. Act of July 13, 1928, employment contracts of theatrical artists and musicians..... | Dec. 130 |
| Columbia. Decree of June 26, 1928, Sunday rest, in public enterprises..... | Dec. 191 |
| Ecuador. Labor legislation preparation, questionnaire inquiry..... | Nov. 90 |
| France. Cheap dwellings for workmen, act of July 9, 1928, summary..... | Sept. 102 |
| — Decree of February 19, 1927, compulsory reporting of occupational diseases..... | Dec. 120-1 |
| Germany. Unemployment insurance act of 1927, various amendments..... | July 58-9 |
| India. Mining act of 1923, amendment limiting hours of work per day to 12..... | Sept. 85-6 |
| Italy. Unemployed, compulsory registration of, decree of March 29, 1928..... | Aug. 87-9 |
| Poland. Act of July 29, 1928, nurseries for infants in factories..... | Dec. 106 |
| Rumania. Act of April 8, 1928, protection of woman and child workers..... | Sept. 86-7 |
| Russia. Housing policy, decree of January 4, 1928..... | Aug. 72-4 |
| Venezuela. New labor law, principal provisions..... | Dec. 130-6 |
| Yugoslavia. Labor legislation (six heads), digest..... | Sept. 87-9 |

Lead poisoning. (See Industrial diseases and poisons.)
Legal aid:

| | |
|---|--------------|
| New York City. Bar Association and Welfare Council joint committee, report and recommendations..... | July 73-6 |
| Organizations, National Association of, directory..... | July 199-200 |
| Pennsylvania law students, work of..... | Sept. 53 |

Lockouts. (See Industrial disputes.)
Longshoremen. (See Docks and harbors.)
Management, industrial. (See Industrial management.)
Marketing associations. (See Cooperation.)
Medical and hospital service:

| | |
|--|------------|
| Ability of patients to pay for medical care..... | Dec. 101-3 |
| Hospitals, operating costs, and charges to patients..... | Aug. 56-7 |

Metal industries:

| | |
|--|---------|
| Apprenticeship and training, Great Britain, 1925 and 1926..... | Aug. 98 |
|--|---------|

Metal Workers of America, Amalgamated:

| | |
|--|---------|
| Arbitration policy with employers..... | Oct. 19 |
|--|---------|

Metallurgical works (except Wages and hours, which see), United States:

| | |
|---|-----------|
| Accident statistics, 1926. Bureau of Mines Technical Paper No. 430..... | Nov. 56-7 |
|---|-----------|

Mine Workers of America, United:

| | |
|--|--------------|
| Agreement. Rocky Mountain Fuel Co., September, 1928..... | Oct. 196-202 |
|--|--------------|

Minimum wage, United States:

| | |
|--|---------|
| Massachusetts. Annual report, 1926-27..... | Nov. 34 |
|--|---------|

Minimum wage, foreign countries:

| | |
|--|-------------|
| Japan. Seamen, scale, by class of crew, from July 1, 1928..... | Nov. 139-40 |
|--|-------------|

Mining (except Wages and hours, which see), United States:

| | |
|---|-----------|
| Bituminous coal. Consolidation Coal Co. shutdown of 10 mines, marketing and operating policy..... | July 27-8 |
|---|-----------|

| | |
|---|-----------|
| Coal. Machine methods of operation, survey..... | Dec. 92-3 |
|---|-----------|

| | |
|---|------------|
| — Mechanical systems, newer, and increased accident hazards. Bureau of Mines study..... | Aug. 49-51 |
|---|------------|

| | |
|--|----------|
| Metalliferous. Accident statistics, Colorado, 1926 and 1927..... | Sept. 70 |
|--|----------|

| | |
|--|---------|
| Strikes. Bills introduced 1927-28 (70th Cong., 1st sess.)..... | Aug. 93 |
|--|---------|

Mining (except Wages and hours, which see), foreign countries:

| | |
|---|-----------|
| Australia (Western Australia). Metalliferous mines, silicosis and tuberculosis hazard, 1925-26..... | Aug. 64-5 |
|---|-----------|

| | |
|---|---------|
| Bolivia. Mining police, duties, decree of February 2, 1928..... | Aug. 40 |
|---|---------|

| | |
|--|-----------|
| Great Britain (England). Coal, report of secretary of mines, 1927..... | Oct. 47-8 |
|--|-----------|

INDEX TO VOLUME 27

[1928

| | |
|---|-------------------|
| Mining—Continued. | Page |
| India. Underground employment of women, regulation..... | Nov. 52 |
| Japan. Child labor, prohibition of..... | Nov. 55 |
| Mobility of labor. (See Labor turnover.) | |
| Morbidity rates. (See Sickness statistics.) | |
| Mothers' pensions: | |
| Legislation. Kentucky, Illinois, and Louisiana, 1928..... | Dec. 126 |
| Mothers' pensions, foreign countries: | |
| Canada (Saskatchewan). Report, 1927..... | Aug. 83-4 |
| Motors, small, manufacture of (<i>except</i> Wages and hours, <i>which see</i>): | |
| Description of occupations..... | Nov. 129-30 |
| Mule-spinners' cancer. (See Industrial diseases and poisons.) | |
| Musicians, American Federation of: | |
| Opposition to "talking movies"..... | Nov. 159-60 |
| Negroes: | |
| Negro Industrial Commission, bill to create (70th Cong., 1st sess.)..... | Aug. 92 |
| Night work: | |
| Woman workers. Women's Bureau Bulletin No 64..... | Dec. 94-6 |
| Noise. (See Health and hygiene.) | |
| Nonunion labor: | |
| Federal public works, United States..... | Nov. 83-5 |
| Nurseries. (See Health and hygiene.) | |
| Obituary. (See Labor officials, changes in personnel of.) | |
| Occupational diseases. (See Industrial diseases and poisons.) | |
| Occupational diseases, claims for. (See Workmen's compensation and insurance.) | |
| Occupational diseases, physical examination for. (See Physical examinations.) | |
| Office employees: | |
| Health of. Metropolitan Life Insurance Co. study..... | Aug. 58-60 |
| Working conditions and extra compensation plans..... | Aug. 34-6 |
| Oil industry (<i>except</i> Wages and hours, <i>which see</i>): | |
| California. Petroleum drilling and producing, fatalities, 1927..... | Dec. 97-8 |
| — Six-day week adopted, 1928..... | Aug. 138 |
| Oklahoma. Pipe-tool accidents in the petroleum industry, 1923..... | Aug. 54-5 |
| Old-age and invalidity insurance and pensions, United States: | |
| Carpenters and Joiners of America, United Brotherhood of, adoption of old-age pension plan..... | Nov. 112 |
| Legislation, and bills introduced, 1927-28 (70th Cong., 1st sess.)..... | Aug. 95 |
| Massachusetts. Acts 1928, old-age pensions, provisions..... | Aug. 82; Dec. 126 |
| Morris & Co., pension plan, court decision..... | Sept. 76-7 |
| Public service. Legislation, Massachusetts and New York, 1928..... | Dec. 126 |
| Public service retirement systems. Firemen..... | Oct. 31-36 |
| — Police..... | Oct. 24-31 |
| — Police and fire departments combined..... | Oct. 37-39 |
| — Teachers. State and city..... | July 15-26 |
| Old-age and invalidity insurance and pensions, foreign countries: | |
| Canada. Dominion Government, pensions agreements with provinces..... | Aug. 83 |
| Great Britain (England and Northern Ireland). Hospital executives and employees, general pension system, January 1, 1928..... | Aug. 84-5 |
| — (Scotland). Contributory pensions act, operations, 1927-28..... | Aug. 85-6 |
| South Africa. Pension scheme, effective January 1, 1929, principal features..... | Aug. 86 |
| — Summary of old-pension act in effect January 1, 1929..... | Sept. 101 |
| Organized labor. (See Labor organizations.) | |
| Orientals: | |
| Asiatics, racial difficulties, Pacific Coast States..... | Dec. 90-2 |
| Chinese and Japanese in Pacific Coast States..... | Dec. 90-2 |
| Orphans' pensions. (See Widows' and orphans' pensions.) | |
| Painting, spray. (See Health hazards.) | |
| Paper-box industry (<i>except</i> Wages and hours, <i>which see</i>): | |
| New York City. Working conditions, April and May, 1927..... | July 28-9 |
| Park systems, city, recreational opportunities provided by..... | July 1-7 |
| Pensions, mothers'. (See Mothers' pensions.) | |
| Pensions, old-age. (See Old-age and invalidity insurance, and pensions.) | |
| Pensions, widows' and orphans'. (See Widows' and orphans' pensions.) | |
| Personnel of labor officials, changes in. (See Labor officials, changes in personnel of.) | |
| Petroleum industry. (See Oil industry.) | |

INDEX TO VOLUME 27

[1928

Photo-Engravers. (See Engravers.)

Physical examinations:

| | Page |
|---|-------------------|
| Canada (Ontario). Mine workers, underground, act of April 3, 1928..... | Sept. 72 |
| Legislation, types of, for occupational diseases, various States..... | Sept. 73 |
| Physique of women in industry, anthropometric data, Great Britain..... | Aug. 61-3 |
| Pocketbook industry (<i>except</i> Wages and hours, <i>which see</i>): | |
| Trade-union cooperation with employers, New York..... | Oct. 13 |
| Pocketbook Workers' Union, International: | |
| Health work of..... | Dec. 15 |
| Police retirement systems. (See Old-age and invalidity insurance and pensions.) | |
| Population, estimated, 78 cities, July 1, 1928..... | Oct. 114-15 |
| Portland cement. (See Cement industry.) | |
| Posture, working. (See Health and hygiene.) | |
| Pottery industry (<i>except</i> Wages and hours, <i>which see</i>): | |
| Great Britain. Silicosis, compensation for..... | Nov. 67-9 |
| Power equipment, growth in use of, United States, 1849 to 1923..... | July 36-8 |
| Printing Pressmen's and Assistants' Union of North America, International: | |
| Arbitration policy with employers..... | Oct. 20 |
| Widows and orphans' colony, Tennessee, endowment fund voted..... | Nov. 112-13 |
| Printing trades (<i>except</i> Wages and hours, <i>which see</i>): | |
| Education work of International Typographical Union, 1927-28..... | Nov. 101-3 |
| General health work of labor organizations..... | Dec. 15-16; 19-20 |
| Trade-union cooperation with employers..... | Oct. 8-9 |
| Typographical Union, International, membership and death rate, 1900 to 1928..... | Nov. 65 |
| Production and productivity, United States: | |
| Automobile foundry work. Nash Motors Co. 50 per cent increase..... | Aug. 41 |
| Blast furnaces, merchant. Productivity of labor in..... | Dec. 1-10 |
| Cotton harvesting. Labor requirements and costs, Oklahoma and Texas..... | Oct. 50-2 |
| Woolen and worsted industry, time and labor cost (Baldwin)..... | Sept. 1-26 |
| Production and productivity, foreign countries: | |
| China. Pig-iron production, cost items..... | Aug. 43-7 |
| Europe. Mining, coal, relative level of average output and average labor cost, by country and district..... | Oct. 102-3 |
| France. Woolen and worsted industry, time and labor cost (Baldwin)..... | Sept. 1-26 |
| Germany. Noise, lessening of, and increased production..... | Aug. 41-2 |
| — Woolen and worsted industry, time and labor cost (Baldwin)..... | Sept. 1-26 |
| Great Britain (England). Woolen and worsted industry, time and labor cost (Baldwin)..... | Sept. 1-26 |
| Profit sharing: | |
| Employee stock ownership plans, United States, National Industrial Conference Board Survey..... | Aug. 99-103 |
| Employee stock participation, Leighton Cooperative Industries, San Francisco..... | Aug. 103-6 |
| Protection of labor in Soviet Russia (Price)..... | July 32-5 |
| Public Employment Services of the United States and Canada, International Association of: Convention. Sixteenth annual, Cleveland, September 18-21, 1928..... | Nov. 160-1 |
| Public service: | |
| — Teachers. State and city..... | July 15-26 |
| United States. Government employees, legislation, and bills introduced, 1927-28 (70th Cong., 1st sess.)..... | Aug. 96-7 |
| — Nonunion labor on public works..... | Nov. 83-5 |
| Public works: | |
| Government contracts, labor under, bills introduced, 1927-28 (70th Cong., 1st sess.)..... | Aug. 95-6 |
| (See also Construction work; Public service.) | |

Radioactive paint. (See Industrial diseases and poisons.)

Radium necrosis. (See Industrial diseases and poisons.)

Railroads, United States:

| | |
|--|-------------------|
| Accident experience, 1926 and 1927, Interstate Commerce Commission Bulletin No. 96.. | Sept. 68-9 |
| Apprentice training scheme, Union Pacific System..... | Nov. 99-101 |
| Arbitration. Railway clerks, St. Louis-San Francisco Railway Co., wage increase, August 2, 1928..... | Oct. 202-3 |
| — Signalmen, Nashville, Chattanooga & St. Louis Railway, wage increase, June 21, 1928..... | Oct. 203 |
| Arbitration act of 1926. Arbitrators agreeing to disagree, court decision..... | Sept. 73-4 |
| — Emergency board findings, Kansas City, Mexico & Orient Railway case, full text.. | Aug. 114-17 |
| — Emergency board report, trainmen's dispute, western roads..... | Oct. 84; Dec. 170 |

Railroads, United States—Continued.

| | |
|--|------------------|
| Arbitration award. K. O. & G. Railway Co. and Midland Valley Railroad Co., and telegraphers..... | Page Nov. 195 |
| — Telegraphers, Baltimore & Ohio Railroad Co..... | Aug. 212-13 |
| Repair work. To be done within State, legislation, Arkansas, Louisiana, Texas..... | Sept. 81 |
| Stability of employment, by road, and by occupation, 1922-1927 (Dunlap)..... | Aug. 19-28 |
| Telephone operator. Arizona statutory qualification for, held unconstitutional..... | Sept. 81-3 |
| Terminals. Removal of, and possible loss to employees, Montana legislation..... | Sept. 79-81 |
| Trade-union cooperation with employers..... | Oct. 12, 13 |
| Training of dining-car employees, Pennsylvania Railroad..... | Dec. 157-8 |

Railroads, foreign countries:

| | |
|--|--------------|
| Canada. National Railways and Federation of Shop Trades, joint cooperative plan, constitution adopted, 1927..... | July 30-1 |
| Great Britain (England). Wage-cut agreement, August 13, 1928..... | Sept. 149-50 |

Railway and Steamship Clerks. (See Clerks, Freight Handlers, Express and Station Employees, Brotherhood of.)

Recreation:

| | |
|--|-----------|
| City park systems, providing opportunities for..... | July 1-7 |
| City plans for, spread of, statistics, 1922 and 1927..... | Aug. 60-1 |
| Italy. Opera Nazionale Dopolavoro, work of organization, report, 1927..... | Oct. 75-9 |

Rehabilitation, reeducation, and reemployment, United States:

| | |
|---|------------|
| Legislation, and bills introduced, 1927-28 (70th Cong., 1st sess.)..... | Aug. 95 |
| Workmen's compensation legislation in relation to..... | July 79-80 |

Research, industrial. (See Industrial research.)

Retail prices, United States:

| | |
|--|--|
| Coal. Average and relative prices, by kind, specified dates, 1913 to 1928..... | Aug. 177 |
| — By city, specified dates, 1913, 1927, and 1928..... | July 164-6; Aug. 173-6; Sept. 188-91; Oct. 182-5; Nov. 188-91; Dec. 232-5 |
| Electricity. By city, specified dates, 1913 and 1926 to 1928..... | Aug. 180-3 |
| Food. (See article entitled "Retail prices of Food in the United States," each issue of the Review.) | |
| Gas. By city, specified dates, 1913 to 1928..... | Aug. 178-9 |
| Index numbers. Comparison, United States and foreign countries, by month, 1924 to 1928..... | July 168-9 Oct. 188-9 |

Retail prices, foreign countries:

| | |
|---|--------------------|
| Australia. Foods and groceries, index numbers, by month, 1924 to 1928..... | July 169; Oct. 189 |
| Belgium. Foods, etc., index numbers, by month, 1924 to 1928..... | July 168; Oct. 188 |
| Canada. Foods, index numbers, by month, 1924 to 1928..... | July 168; Oct. 188 |
| Czechoslovakia. Foods, index numbers, by month, 1924 to 1928..... | July 168; Oct. 188 |
| Denmark. Foods, index numbers, semiannual, 1924 to 1926, quarterly, 1927, 1928..... | July 168; Oct. 188 |
| Finland. Foods, index numbers, by month, 1924 to 1928..... | July 168; Oct. 188 |
| France (except Paris). Foods and fuels, index numbers, quarterly, 1924 to 1928..... | July 168; Oct. 188 |
| France (Paris). Foods and fuels, index numbers, by month, 1924 to 1928..... | July 138; Oct. 188 |
| Germany. Foods, index numbers, by month, 1924 to 1928..... | July 168; Oct. 188 |
| Great Britain (England). Clothing, percentage increase, 1928 over 1914..... | Oct. 190 |
| India (Bombay). Foods, index numbers, by month, 1924 to 1928..... | July 169; Oct. 189 |
| Italy. Foods and charcoal, index numbers, by month, 1924 to 1928..... | July 169; Oct. 189 |
| Netherlands. Foods, etc., index numbers, by month, 1924 to 1928..... | July 169; Oct. 189 |
| New Zealand. Foods, index numbers, by month, 1924 to 1928..... | July 169; Oct. 189 |
| Norway. Foods, index numbers, by month, 1924 to 1928..... | July 169; Oct. 189 |
| South Africa. Foods, index numbers, by month, 1924 to 1928..... | July 169; Oct. 189 |
| Sweden. Foods, fuel, and light, index numbers, by month, 1924 to 1928..... | July 169; Oct. 189 |
| Switzerland. Foods, index numbers, by month, 1924 to 1928..... | July 169; Oct. 189 |
| United Kingdom. Foods, index numbers, by month, 1924 to 1928..... | July 169; Oct. 189 |

Retirement systems. (See Old-age and invalidity insurance, and pensions.)

Safety. (See Accident prevention.)

Sanitation, working conditions, and factory inspection, United States:

| | |
|---|-----------|
| Paper-box industry, New York City, April and May, 1927..... | July 28-9 |
|---|-----------|

Sanitation, working conditions, and factory inspection, foreign countries:

| | |
|--|-----------|
| Great Britain. Report, chief inspector of factories and workshops, 1927..... | Oct. 61-4 |
| India (Burma). Factory conditions, report of chief inspector, 1927..... | Nov. 37 |
| Russia (Soviet). Labor Code provisions..... | July 33-5 |

School attendance. (See Child labor and welfare.)

Schools, industrial. (See Vocational education.)

| | |
|--|----------------|
| Seamen (<i>except</i> Wages and hours, <i>which see</i>), United States: | Page |
| Legislation, and bills introduced, 1927-28 (70th Cong., 1st sess.)..... | Aug. 92 |
| Pacific Coast shipowners' employment agency not a combination in restraint of trade, court decision..... | Dec. 127-30 |
| Seasonal fluctuations. (<i>See</i> Employment, stabilization of.) | |
| Seating arrangements. (<i>See</i> Health and hygiene.) | |
| Shift systems: | |
| Machine shops. Morgan Construction Co., Worcester (Mass.), 2-shift system without night work..... | Oct. 104 |
| Shipbuilding (<i>except</i> Wages and hours, <i>which see</i>), United States: | |
| Waste, elimination of, through suggestions of employees, Newport News Shipbuilding & Dry Dock Co..... | Aug. 42-3 |
| Shipowners' Association of the Pacific Coast: | |
| Court decision. Employment agency not a combination in restraint of trade..... | Dec. 127-30 |
| Sickness statistics: | |
| Office employees, morbidity rates, Metropolitan Life Insurance Co., study..... | Aug. 59 |
| Signalmen of America, Brotherhood of Railroad: | |
| Award. Nashville, Chattanooga & St. Louis Railway, June 21, 1928..... | Oct. 203 |
| Silicosis. (<i>See</i> Industrial diseases and poisons.) | |
| Six-day week: | |
| Oil industry (California) adopted, 1928..... | Aug. 138 |
| Small claims court: | |
| Des Moines (Ia.) conciliation court, one year's operation of..... | Nov. 38-40 |
| Social insurance: | |
| Germany. Deductions (per cent) from wages, textile workers, 1927..... | July 125 |
| United States. Bills introduced, 1927-28 (70th Cong., 1st sess.)..... | Aug. 94-5 |
| Social work, conference on, first regional (California, Oregon, Washington), May, 1928..... | Aug. 37-9 |
| Spray painting. (<i>See</i> Health hazards.) | |
| Stability of employment. (<i>See</i> Employment, stabilization of.) | |
| Standard of living: | |
| Indian communities, United States..... | Oct. 45-6 |
| Stock ownership, employee: | |
| Investment and speculation features..... | Sept. 49-53 |
| (<i>See also</i> Profit sharing.) | |
| Street and Electric Railway Employees of America, Amalgamated Association of: | |
| Cooperative policy with employers..... | Oct. 13 |
| Street railways (<i>except</i> Wages and hours, <i>which see</i>): | |
| Trade-union cooperation with employers..... | Oct. 12, 13 |
| Strikes and lockouts. (<i>See</i> Industrial disputes.) | |
| Sunday and holiday work, foreign countries: | |
| Colombia. Decree of June 26, 1928, Sunday rest, public enterprises..... | Dec. 191 |
| "Talking movies," effect of, upon employment of musicians and of actors..... | Nov. 159-60 |
| Teachers, public school. (<i>See</i> Public service.) | |
| Telegraphers, Order of Railroad: | |
| Arbitration award. Baltimore & Ohio Railroad Co., June 6, 1928..... | Aug. 212-13 |
| Award. K. O. & G. Railway Co. and Midland Valley Railroad Co., September 27, 1928..... | Nov. 195 |
| Textile Workers of America, United: | |
| Cooperative policy with employers..... | Oct. 14-15, 16 |
| Tobacco Workers' International Union: | |
| Arbitration policy with employers..... | Oct. 19 |
| Trade-unions. (<i>See</i> Labor organizations.) | |
| Training, industrial. (<i>See</i> Apprenticeship; Vocational education.) | |
| Tuberculosis. (<i>See</i> Industrial diseases and poisons.) | |
| Typographical Union of North America, International: | |
| Cooperative policy with employers..... | Oct. 18, 20 |
| Education bureau, work of, 1927-28..... | Nov. 101-3 |
| Membership and death rate, 1900 to 1928..... | Nov. 65 |
| Unemployment: | |
| Actors, effect of "talkie movies" upon employment of..... | Nov. 159-60 |
| Australia. Seasonal fluctuations and business stability..... | Dec. 78-82 |
| Belgium. Latter part of 1928..... | Dec. 74 |
| Canada (Manitoba). Seasonal; causes, other findings, and recommendations, special commission report..... | July 144-6 |
| Czechoslovakia. Latter part of 1928..... | Dec. 74-5 |
| Denmark. Latter part of 1928..... | Dec. 75 |

| Unemployment—Continued. | | Page |
|--|--|-------------------------|
| Estonia. Latter part of 1928..... | | Dec. 75 |
| Europe. Conditions, by country, latter part of 1928..... | | Dec. 72-8 |
| European labor exchanges, work of (Speek)..... | | Dec. 54-9 |
| France. Latter part of 1928..... | | Dec. 75 |
| Germany. Latter part of 1928..... | | Dec. 75-6 |
| Great Britain. Latter part of 1928..... | | Dec. 76 |
| Great Britain (England). Juveniles, work of advisory committees, 1927..... | | Nov. 53-5 |
| Hungary. Latter part of 1928..... | | Dec. 76-7 |
| Information, sources of. Character and value of employment statistics..... | | Dec. 34-48 |
| Investigation of. La Follette resolution (S. Res. 219), May 19, 1928..... | | July 56 |
| Italy. Compulsory registration at employment exchanges, decree of March 29, 1928..... | | Aug. 87-9 |
| — Latter part of 1928..... | | Dec. 77 |
| Japan. Research bureau established, functions..... | | Nov. 165 |
| Legislation, and bills introduced, 1927-28 (70th Cong., 1st sess.)..... | | Aug. 94 |
| Massachusetts. Building trades, organized workers, statistics, April, 1927, to October, 1928..... | | Oct. 159-60; Dec. 208-9 |
| Musicians, effect of "talkie movies" upon employment of..... | | Nov. 159-60 |
| Netherlands. Latter part of 1928..... | | Dec. 77 |
| Norway. Latter part of 1928..... | | Dec. 77 |
| Poland. Latter part of 1928..... | | Dec. 77-8 |
| Public works, power in averting cyclical unemployment, study, 1919-1925..... | | Dec. 82-5 |
| Statistics. Digest of, by country..... | | Dec. 37-40, 43-8 |
| Sweden. Census of, in 1927..... | | Nov. 165-70 |
| — Latter part of 1928..... | | Dec. 78 |
| — Registry of unemployed, statistics..... | | July 64 |
| — Relief work (communal and State), and Government dole..... | | July 61-5 |
| — Strikes and lockouts, attitude of unemployment commission..... | | July 65 |
| Switzerland. Latter part of 1928..... | | Dec. 78 |
| United States. Hoover (President-elect) plan for a three billion dollar reserve construction fund..... | | Dec. 48-9 |
| Unemployment insurance, United States: | | |
| Clothing industry. New York, by agreement..... | | Sept. 96-7 |
| Clothing industry, men's. Chicago and Rochester, 3-year agreement to provide fund..... | | July 56-7 |
| Compulsory system, bill introduced, 1927-28 (70th Cong., 1st sess.)..... | | Aug. 95 |
| Unemployment insurance, foreign countries: | | |
| Australia (Queensland). Law of 1922, and amendment of December, 1927..... | | July 57-8; Dec. 62 |
| — Rates of contribution, increase effective July 1, 1928..... | | Aug. 87 |
| Austria. Law of March 24, 1920, operation..... | | Dec. 63 |
| Belgium. Operation of system..... | | Dec. 63-4 |
| Bulgaria. Law of May 25, 1925, operation..... | | Dec. 64 |
| Canada. House of Commons, committee report..... | | Sept. 100-1 |
| Czechoslovakia. Act of July 19, 1921, operation..... | | Dec. 64-5 |
| Denmark. Act of December 22, 1921, operation..... | | Dec. 65 |
| Finland. Order of November 2, 1917, operation..... | | Dec. 65 |
| France. Voluntary funds and State subsidy, operation..... | | Dec. 65-6 |
| Germany. Law of 1927, various amendments, and operation..... | | July 58-9; Dec. 66-7 |
| Great Britain. Act of 1911 and amendments, operation..... | | Dec. 67-8 |
| — Benefit claimants, April 4 to 9, 1927, study of, Ministry of Labor report..... | | July 59-61 |
| Irish Free State. British system, operation..... | | Dec. 68 |
| Italy. Decrees of 1919 and 1923, operation..... | | Dec. 68-9 |
| Luxemburg. Act of August 6, 1921, operation..... | | Dec. 69 |
| Netherlands. Order of December 2, 1916, and amendments, operation..... | | Dec. 69-70 |
| Norway. Voluntary funds and State subsidy, operation..... | | Dec. 70 |
| Poland. Law of July 31, 1924, operation..... | | Dec. 70 |
| Russia. Labor code of November 9, 1922, operation..... | | Dec. 71 |
| Spain. Decrees of 1919 and 1923, operation..... | | Dec. 72 |
| Switzerland. Law of October 17, 1924, operation..... | | Dec. 72 |
| Union-management cooperation: | | |
| Canadian National Railways. Constitution of joint cooperative plan adopted, 1927..... | | July 30-1 |
| Railway industry. "Baltimore & Ohio plan," essentials and results..... | | Oct. 4-8, 16 |
| Trade-union cooperation with employers..... | | Oct. 1-23 |
| Union scales of wages. (See Wages and hours.) | | |
| Unionization of labor, China, development (Tso)..... | | Aug. 32 |
| Upholsterers' International Union of North America: | | |
| Cooperative policy with employers..... | | Oct. 9-10 |

| | |
|---|--------------|
| Vacations with pay: | Page |
| Office employees. American Management Association study..... | Aug. 34-5 |
| Vital statistics: | |
| Printing trades. Death rate and membership, International Typographical Union, 1900-1928..... | Nov. 65 |
| Vocational education, United States: | |
| Continuation school law (New York) held constitutional..... | Sept. 77-8 |
| Essex County Vocational School, West Orange (N. J.), 4-year experiment in safety education..... | Aug. 52-3 |
| Indian boarding schools, training courses..... | Oct. 46-7 |
| Legislation. Virginia and New Jersey, 1928..... | Dec. 127 |
| Legislation, and bills introduced, 1927-28 (70th Cong., 1st sess.)..... | Aug. 95 |
| Pennsylvania Railroad schools for training dining-car employees (stewards, cooks, and waiters)..... | Dec. 157-8 |
| Vocational rehabilitation. (See Rehabilitation, reeducation, and reemployment.) | |
| Wage system, ancient (China), theory of Confucius (Tso)..... | Aug. 30 |
| Wages and hours, United States: | |
| Aluminum, brass, and copper wares industry. By occupation, State, and sex, 1927..... | Aug. 122-9 |
| Bakers. Union scale, average, May, 1927 and 1928..... | Nov. 14-18 |
| Batteries, dry-cell. By occupation and sex, 1927..... | Nov. 122 |
| Batteries, storage. By occupation and sex, 1927..... | Nov. 125 |
| Boot and shoe industry. By State, department, occupation, and sex, 1928..... | Dec. 179-88 |
| Brass sheet, rod, tube, wire, and shape mills. By occupation, State, and sex, 1927..... | Aug. 130-8 |
| Brass wares, manufacture of. By occupation, State, and sex, 1927..... | Aug. 122-9 |
| Bricklayers. By city, union scales, 1913 and 1917 to 1928..... | Sept. 115-16 |
| Building laborers. By city, union scales, 1913 and 1917 to 1928..... | Sept. 116-17 |
| Building trades. Union scale, by occupation, average, May, 1927 and 1928..... | Nov. 14-18 |
| Bus drivers. Union scale, average, May, 1927 and 1928..... | Nov. 15-18 |
| Carpenters. By city, union scales, 1913 and 1917 to 1928..... | Sept. 117-18 |
| Cement finishers. By city, union scales, 1913 and 1917 to 1928..... | Sept. 118-19 |
| Chauffeurs, teamsters, and drivers. Union scale, average, May, 1927 and 1928..... | Nov. 14-18 |
| Common labor. (See Wages and hours: Unskilled labor.) | |
| Compositors, book and job. By city, union scales, 1913 and 1917 to 1928..... | Sept. 119-20 |
| Compositors, newspaper. By city, union scales, 1913 and 1917 to 1928..... | Sept. 121 |
| Copper sheet, rod, tube, wire and shape mills. By occupation, State, and sex, 1927..... | Aug. 130-8 |
| Copper wares, manufacture of. By occupation, State, and sex, 1927..... | Aug. 122-9 |
| Cotton manufacture. By State, occupation, and sex, 1928..... | Oct. 89-95 |
| Cottonseed-oil mills. By occupation, State, and race, 1927..... | July 109-23 |
| Electrotypers, finishers. By city, union scales, 1913 and 1917 to 1928..... | Sept. 122 |
| Electrotypers, molders. By city, union scales, 1913 and 1917 to 1928..... | Sept. 123 |
| Farm labor. 1910 to October, 1928 (<i>wages only</i>)..... | Dec. 188-90 |
| Food canning and preserving. Wisconsin, pea canneries, report, 1927..... | Sept. 148-9 |
| Foundries and machine shops. Motor manufacture, fractional horsepower, by occupation and sex, 1927..... | Nov. 128 |
| Granite cutters. Union scale, average, May, 1927 and 1928..... | Nov. 14-18 |
| Granite cutters, inside. By city, union scales, 1913 and 1917 to 1928..... | Sept. 124 |
| Grape pickers. California, by district (<i>wages only</i>)..... | Dec. 190-1 |
| Hod carriers. By city, union scales, 1913 and 1917 to 1928..... | Sept. 125 |
| Inside wiremen. By city, union scales, 1913 and 1917 to 1928..... | Sept. 126-7 |
| Laundry workers. Union scale, average, May, 1927 and 1928..... | Nov. 15-18 |
| Legislation of 1928, by State..... | Dec. 123-4 |
| Linemen. Union scale, average, May, 1927 and 1928..... | Nov. 15-18 |
| Longshoremen. Union scale, average, May, 1927 and 1928..... | Nov. 15-18 |
| Lumber industry. Sawmills, by State and occupation, 1928..... | Dec. 173-8 |
| Mining, coal. Rocky Mountain Fuel Co. scale, September, 1928..... | Oct. 199-202 |
| Motormen and conductors. Union scale, average, May, 1927 and 1928..... | Nov. 15-18 |
| Motors, fractional horsepower. By occupation and sex, 1927..... | Nov. 128 |
| Office employees. Hours of work (<i>only</i>)..... | Aug. 34 |
| Painters. By city, union scales, 1913 and 1917 to 1928..... | Sept. 127-8 |
| Paper-box industry. New York City, 1927..... | July 29 |
| Pea canneries. (See Wages and hours: Food canning and preserving.) | |
| Plasterers. By city, union scales, 1913 and 1917 to 1928..... | Sept. 128-9 |
| Plasterers' laborers. By city, union scales, 1913 and 1917 to 1928..... | Sept. 129-30 |
| Plumbers. By city, union scales, 1913 and 1917 to 1928..... | Sept. 130-1 |
| Printing trades. Book and job, union scale, by occupation, average, May 15, 1927 and 1928..... | Nov. 15-18 |

Wages and hours, United States—Continued.

| | Page |
|--|-------------------------|
| Printing trades. Newspaper, by occupation, average, May, 1927 and 1928..... | Nov. 15-18 |
| Radio manufacturing industry. By occupation and sex, 1927..... | Sept. 138-48 |
| Receiving sets, radio manufacturing industry. By occupation and sex, 1927..... | Sept. 139-41 |
| Rod mills (brass and copper). By occupation, State, and sex, 1927..... | Aug. 130-8 |
| Sawmills. By State and occupation, 1928..... | Dec. 173-8 |
| Sheet, rod, tube, wire and shape mills (brass and copper). By occupation, State, and sex, 1927..... | Aug. 130-8 |
| Sheet-metal workers. By city, union scales, 1913 and 1927 to 1928..... | Sept. 131-2 |
| Speakers, radio manufacturing industry. By occupation and sex, 1927..... | Sept. 142-4 |
| Stonecutters. By city, union scales, 1913 and 1917 to 1928..... | Sept. 132-3; Nov. 14-18 |
| Structural-iron workers. By city, union scales, 1913 and 1917 to 1928..... | Sept. 133-4 |
| Tube mills (brass and copper). By occupation, State, and sex, 1927..... | Aug. 130-8 |
| Tubes, receiving, radio manufacturing industry. By occupation and sex, 1927..... | Sept. 144-8 |
| Typesetting-machine operators, book and job. By city, union scales, 1913 and 1917 to 1928 | Sept. 134-5 |
| Typesetting-machine operators, newspaper. By city, union scales, 1913 and 1917 to 1928 | Sept. 136-7 |
| Union scales, index numbers, by occupation, May, 1923 to 1928..... | Nov. 10-18 |
| Unskilled labor. Entrance rates, by industry (13), July 1, 1928..... | Oct. 95-8 |
| Wire and shape mills (brass and copper). By occupation, State, and sex, 1927..... | Aug. 130-8 |
| Woolen and worsted industry. By occupation and sex, 1928..... | Sept. 22; Nov. 131-7 |
| Wages and hours, foreign countries: | |
| Europe. Mining, coal, by country and district, 1925..... | Oct. 98-104 |
| France. Automobiles, by occupation, 1927 and 1928 (<i>wages only</i>)..... | Nov. 138 |
| — Drop forging, by occupation, 1927 and 1928 (<i>wages only</i>)..... | Nov. 138 |
| — Electrical construction, by occupation, 1927 and 1928 (<i>wages only</i>)..... | Nov. 138 |
| — Iron and steel foundries, by occupation, 1927 and 1928..... | Nov. 138 |
| — Laborers and skilled laborers, by sex, 1927 and 1928 (<i>wages only</i>)..... | Nov. 138 |
| — Machine industries, general. By occupation, 1927 and 1928 (<i>wages only</i>)..... | Nov. 138 |
| — Metal construction, by occupation, 1927 and 1928..... | Nov. 138 |
| — Metal pipe manufacture, by occupation, 1927 and 1928 (<i>wages only</i>)..... | Nov. 138 |
| — Woolen and worsted manufacturing, by occupation, and sex, 1927..... | Sept. 26 |
| Germany. Cloth weaving (wool) (<i>Tuchweberei</i>), by occupation, sex, and locality, 1927..... | Sept. 26 |
| — Iron and steel industry, by department, and occupation in each, 1926, 1928..... | Sept. 151 |
| — Textile industry, by branch and by occupation, 1927..... | July 123-4 |
| — Woolen spinning (<i>Streichgarnspinnerei</i>), by occupation, sex, and locality, 1927..... | Sept. 25 |
| — Worsted spinning (<i>Kammgarnspinnerei</i>), by occupation, sex, and locality, 1927..... | Sept. 25 |
| Great Britain (England). Mining, coal. Earnings per shift, prices and profits, 1927..... | Oct. 48 |
| — Railroads, wage-cut agreement, August 13, 1928..... | Sept. 149-50 |
| — Woolen and worsted manufacturing, by occupation..... | Sept. 24 |
| — Worsted spinning, by occupation..... | Sept. 24 |
| India. Mining act of 1923, amendment limiting hours per day to 12..... | Sept. 85-6 |
| Jamaica. By industry and occupation, 1928 (<i>wages only</i>)..... | Oct. 107 |
| Japan. Seamen, minimum rates from July 1, 1928 (<i>wages only</i>)..... | Nov. 139 |
| Mexico (Aguascalientes). By industry (<i>wages only</i>)..... | Sept. 152 |
| Norway. By occupation and sex, and by industry, July, 1926 and 1927 (<i>wages only</i>)... | Oct. 105-6 |
| Poland. Bakers, by locality, January 1, 1928 (<i>wages only</i>)..... | July 126 |
| — Carpenters, masons, by locality, January 1, 1928 (<i>wages only</i>)..... | July 126 |
| — Oil refining, by locality and by occupation, January 1, 1928 (<i>wages only</i>)..... | July 126 |
| — Printing industry, by locality and by occupation, January 1, 1928 (<i>wages only</i>)... | July 126 |
| — Sugar industry, by occupation (4), January 1, 1928 (<i>wages only</i>)..... | July 126 |
| — Textile industry, by locality, and by branch and occupation, January 1, 1928 (<i>wages only</i>)..... | July 126 |
| Poland (Boryslaw). Oil wells, by occupation, January 1, 1928 (<i>wages only</i>)..... | July 126 |
| Poland (Upper Silesia). Mining, coal, by occupation, underground, January 1, 1928 (<i>wages only</i>)..... | July 126 |
| — Mining, lead and zinc, by occupation, underground, January 1, 1928 (<i>wages only</i>)... | July 126 |
| Poland (Warsaw). Millers, and unskilled laborers, January 1, 1928 (<i>wages only</i>)..... | July 126 |
| Rumania. Act of April 8, 1928, regulating hours..... | Sept. 86-7 |
| Waste, elimination of: | |
| Suggestions from employees, adoption of, and annual savings, Newport News Shipbuilding & Dry Dock Co..... | Aug. 42-3 |
| Watch-dial painters, poisoning cases among, from radioactive paint..... | July 42-3 |
| Welfare work, United States: | |
| Office employees. Features, small and large office..... | Aug. 35-6 |

Wholesale prices, United States:

| | Page |
|---|-------------------------|
| Index numbers. 1923 to 1927, by month, 1923 to 1928..... | Dec. 238-9 |
| — By group and subgroup of commodities, May to October, 1928..... | July 170-1; |
| Aug. 185; Sept. 192-3; Oct. 185-7; Nov. 191-3; Dec. 235-7 | |
| — Comparison, with foreign countries, by month, 1923 to 1928..... | Sept. 194-5; Dec. 238-9 |
| — Revised, by month, 1913 to 1928..... | July 172-5 |
| — Revised, by year, 1890 to 1927..... | Nov. 194 |

Wholesale prices, foreign countries:

| | |
|--|--------------------------|
| Australia. Index numbers, 1923 to 1928, and by month, 1923 to 1928..... | Sept. 195-6; Dec. 239-40 |
| Belgium. Index numbers, 1923 to 1928, and by month, 1923 to 1928..... | Sept. 194-5; Dec. 238-9 |
| Bulgaria. Index numbers, 1923, 1924, and by month, 1923 to 1928..... | Sept. 194-5; Dec. 238-9 |
| Canada. Index numbers, 1923 to 1927, and by month, 1923 to 1928..... | Sept. 194-5; Dec. 238-9 |
| China. Index numbers, 1923 to 1927, and by month, 1923 to 1928..... | Sept. 195-6; Dec. 239-40 |
| Czechoslovakia. Index numbers, 1923 to 1927, and by month, 1923 to 1928..... | Sept. 194-5; Dec. 238-9 |
| Denmark. Index numbers, 1925, 1926, and by month, 1925 to 1928..... | Sept. 194-5; Dec. 238-9 |
| Finland. Index numbers, 1924 to 1927, and by month, 1928 to 1928..... | Sept. 194-5; Dec. 238-9 |
| France. Index numbers, 1923 to 1927, and by month, 1923 to 1928..... | Sept. 194-5; Dec. 238-9 |
| Germany. Index numbers, 1924 to 1927, and by month, 1926 to 1928..... | Sept. 194-5; Dec. 238-9 |
| India. Index numbers, 1923 to 1927, and by month, 1923 to 1928..... | Sept. 195-6; Dec. 239-40 |
| Italy. Index numbers, July, 1923 to 1927, and by month, 1923 to 1928..... | Sept. 194-5; Dec. 238-9 |
| Japan. Index numbers, 1923 to 1927, and by month, 1923 to 1928..... | Sept. 195-6; Dec. 239-40 |
| Netherlands. Index numbers, 1923 to 1927, and by month, 1923 to 1928..... | Sept. 195-6; Dec. 239-40 |
| New Zealand. Index numbers, 1923 to 1927, and by month, 1925 to 1928..... | Sept. 195-6; Dec. 239-40 |
| Norway. Index numbers, 1923 to 1927, and by month, 1923 to 1928..... | Sept. 195-6; Dec. 239-40 |
| South Africa. Index numbers, 1923 to 1927, and by month, 1923 to 1928..... | Sept. 195-6; Dec. 239-40 |
| Spain. Index numbers, 1923 to 1927, and by month, 1923 to 1928..... | Sept. 195-6; Dec. 239-40 |
| Sweden. Index numbers, 1923 to 1927, and by month, 1923 to 1928..... | Sept. 195-6; Dec. 239-40 |
| Switzerland. Index numbers, 1926, 1927, and by month, 1926 to 1928..... | Sept. 195-6; Dec. 239-40 |
| United Kingdom. Index numbers, 1923 to 1927, and by month, 1923 to 1928..... | Sept. 195-6; Dec. 239-40 |

Widows' and orphans' pensions:

| | |
|---|-------------|
| Great Britain (Scotland). Contributory pensions act, operations, 1927-28..... | Aug. 85-6 |
| Printing pressmen and assistants' widows and orphans colony, Tennessee..... | Nov. 112-13 |

Widows having children, remarriage of, Wisconsin experience, 1923 to 1927..... Sept. 93-4

Woman labor, United States:

| | |
|---|------------|
| Education in home making..... | Nov. 103-4 |
| New York State. Hours of labor, Industrial Survey Commission report (second), 1928..... | Sept. 47 |
| Night work. Women's Bureau Bulletin No. 64..... | Dec. 94-6 |
| Prohibitory legislation, effects on employment opportunities. Women's Bureau Bulletin No. 65..... | Nov. 50-2 |
| Regulatory legislation, effects on employment opportunities. Women's Bureau Bulletin No. 65..... | Nov. 41-9 |

Woman labor, foreign countries:

| | |
|---|------------|
| Great Britain. Physique, anthropometric data, London and Glasgow factories..... | Aug. 61-3 |
| India. Mining, employment in, regulation..... | Nov. 52 |
| Poland. Nurseries in factories, for infants of woman workers, law of July 29, 1928..... | Dec. 106 |
| Russia (Soviet). Labor Code provisions..... | July 35 |
| Venezuela. New law, principal provisions..... | Dec. 134-5 |

Woolen and worsted industry (*except* Wages and hours, *which see*):

| | |
|--|------------|
| Production, time and labor cost of, United States, England, France, Germany (Baldwin)..... | Sept. 1-26 |
|--|------------|

Workers' education, United States:

| | |
|---|------------|
| Confectionery industry. Boston, educational experiment, school girls as apprentices every other week..... | July 77-8 |
| Home making, teaching of, to woman wage earners..... | Nov. 103-4 |
| Massachusetts Division of University Extension, work of..... | Nov. 104-7 |
| Seminars for working girls, National Council of Catholic Women..... | Dec. 158 |
| Southern Summer School for Women Workers in Industry..... | Dec. 156-7 |
| Typographical Union, International, work of education bureau, 1927-28..... | Nov. 101-3 |
| Wisconsin Federation of Labor, report of activities, 1927-28..... | Nov. 107 |

Workers' education, foreign countries:

| | |
|--|---------|
| Czechoslovakia. Labor College, radio lectures..... | July 78 |
|--|---------|

Workmen's compensation and insurance, United States:

| | |
|--|------------|
| Compensation coverage, and the small plant (Stewart)..... | Nov. 70-6 |
| Court decisions. (<i>See</i> Decisions of courts.)..... | |
| Legislation, and bills introduced, 1927-28 (70th Cong. 1st sess.)..... | Aug. 94-5 |
| Legislation in relation to vocational rehabilitation..... | July 79-80 |

Workmen's compensation and insurance, United States—Continued.

| | Page |
|---|---------------------|
| Legislation of 1928, by State..... | Dec. 107-12 |
| Longshoremen and harbor workers, compensation act of 1927. Amendment of May 4, 1928..... | July 49 |
| — 1-year experience under..... | Sept. 90-3 |
| New Jersey. Accident cases and cost, by cause, 1927..... | Dec. 98 |
| New York. Accident cases and cost, by cause, 1927-28..... | Dec. 98-100 |
| — Compensated accidents, by kind of disability, 1927 and 1928..... | Dec. 114-15 |
| — Eye injuries, compensation cost, 1924 to 1928..... | Dec. 115 |
| — Industrial Survey Commission, Lindsay Rogers report..... | Sept. 94-6 |
| — Industrial Survey Commission, second report, 1928..... | Sept. 47-8 |
| — Infection cases, hands and fingers, by cause, average cost, 1927 and 1928..... | Dec. 100 |
| New York State Insurance Fund, growth of, report of manager, 1927..... | Oct. 65 |
| Ohio. Occupational disease claims filed, 1927..... | Aug. 53-4 |
| Ohio State Insurance Fund, statement of condition, December 31, 1927..... | Oct. 65-7 |
| Pennsylvania. Illegally employed children, compensation status..... | Oct. 67-9 |
| Remarriage of widows having children, Wisconsin experience, 1923 to 1927..... | Sept. 93-4 |
| Small plant and compensation coverage (Stewart)..... | Nov. 70-6 |
| State reports. Illinois, annual (ninth), 1925-26..... | Aug. 66 |
| — Kansas, Public Service Commission, 1927-28..... | Dec. 116 |
| — Kentucky, annual, 1925-26..... | July 49-50 |
| — Maryland, 1926-27..... | Sept. 97-8 |
| — Nebraska, 2-year period, 1926-1927..... | Dec. 116-17 |
| — New York, 1926-27..... | Aug. 67; Nov. 79-80 |
| — North Dakota (eighth annual), 1926-27..... | July 50 |
| — Ohio, 1926-27..... | Nov. 79; Dec. 117 |
| — Oklahoma, annual (twelfth), 1926-27..... | Aug. 67-8 |
| — Pennsylvania, 1927..... | Nov. 80-2 |
| — Porto Rico, twelfth annual..... | Sept. 98-100 |
| — South Dakota (tenth annual), 1926-27..... | July 51 |
| — Tennessee, fifth annual, 1927..... | Dec. 118 |
| — Utah, financial statements, July 1, 1917, to June 30, 1926..... | July 51-2 |
| — Virginia, biennial, 1924-25 to 1926-27..... | Aug. 68 |
| — Wyoming, annual (twelfth), 1927..... | Aug. 68-9 |
| Texas Employers' Insurance Association, selection of risks..... | Oct. 69-70 |
| United States Employees' Compensation Commission, annual report (eleventh), 1926-27..... | July 54-5 |
| West Virginia. Actuarial audit of State fund, report, joint committee of legislature..... | July 52-3 |
| Wisconsin. Compensation cases settled, by cause and kind of injury, 1927..... | Dec. 118-19 |
| — Wage rates and compensation payments, policy..... | July 53-4 |
| Workmen's compensation and insurance, foreign countries: | |
| Argentina. Reciprocal agreement with Sweden, May 14, 1928..... | Aug. 71 |
| Canada (Alberta). Compensation Board, tenth annual report, 1927..... | Dec. 119-20 |
| (British Columbia). Annual (eleventh) report, 1927..... | Aug. 69-70 |
| (Ontario). Annual report, 1927..... | Aug. 70 |
| Great Britain. Silicosis in pottery industry, Home Office report, 1928..... | Nov. 67-9 |
| Sweden. Reciprocal agreement with Argentina, May 14, 1928..... | Aug. 71 |
| Venezuela. New law, principal provisions..... | Dec. 130-4 |

